

**BILL OF MATERIAL
FOR CARS IN CLASS
R-40-30
SERIES
100003 — 100502**

PACIFIC FRUIT EXPRESS COMPANY
OFFICE OF GEN. SUPT. CAR DEPT.
SAN FRANCISCO, CALIFORNIA
REV. APRIL 1, 1958



INDEX

	PAGE
Air Brakes	11
Axle.....	1
Belt Rail.....	17
Bolster.....	2
Bolt List.....	40-41, 42
Brake Step.....	23
Bulkhead.....	18
Ceiling - Alum.....	21
Ceiling - Framing	21
Coupler	6
Coping Board	17
Draft Gear	6
Drain Pan	16
Door - Side	25
Door - Comp.	32
End - Steel	9
End Framing - B	17
Floor - Sub	16
Floor Stringers	16
Floor Racks	33, 34
Framing - Walls	17
Framing "A" End - Equipco..	18
Framing "A" End - Trane....	19
Framing "A" End - Carrier..	20
Fuel Tank	13
Fuel Conn. Tank	14
Hand Brake	12
Handholds	10
Insulation - Floor	45

	PAGE
Insulation - Walls	47-48-49-50
Insulation - Roof	46
Ladders	10
Lining	22
Levers - Truck	1
Machine Comp.	15
Mech. Unit - Carrier	26-27
Mech. Unit - Equipco	28-29
Mech. Unit - Trane	30-31
Nail List	36
Paint	35
Pressed Wood	51
Plywood	52-53-54
Rivet List	38-39
Roof - Steel	23
Reflective Paper	43
Roller Bearings	1
Side Framing	17
Sides & Ends	10
Sheathing	7-8
Springs	2
Stud List	37
Trucks	1
Thermometer	15
Underframe	3-4-5
Vapor Barrier	44
Waterproof Floor	24
Washers - GT	10

MATERIAL

A—Aluminum
B—Brass
C—Copper
R—Rubber
S—Steel Black
W—Wood
G—Galv. Steel

SOURCE OF SUPPLY

F—Furnished complete by an outside manufacturer.
M—Raw material to be purchased and fabricated by PFE.
P—A component part of an item that is furnished complete by an outside manufacturer.
O—An item furnished by one manufacturer to form a part of an assembly furnished by another.
SH—Secondhand, Reclaimed or Reconditioned material.

Revised May 27, 1958

TRUCKS

ITEM Drwg. 4R-4448 (Buckeye) 3R-4364 (Sym.)

250 CARS "BUCKEYE" C-R

CODE	SOURCE OF SUPPLY	MATERIAL	WEIGHT	PIECE NUMBERS	DRAWING	UNITS PER CAR	ITEM
F	S	625#		4R-4447	4	Truck Side Frame	42-CS-479
F	S	850#		4R-4446	2	Truck Bolster	42-CS-480
P	S			1R-4445	8	Friction Wedge Spring	
P	S			2R-4443	8	Friction Wedge Block	
P	S				8	Friction Plate	5" x 3/8" x 8"
F	S			362-2415	20	Truck Springs (Outer Coil)	3-11/16" Travel
F	S			362-2415	8	Truck Springs (Inner Coil)	3-11/16" Travel
P	S				2	Dead Lever Fulcrum Bracket	

150 CARS "BARBER" TYPE S-2-C SYMINGTON-GOULD

CODE	SOURCE OF SUPPLY	MATERIAL	WEIGHT	PIECE NUMBERS	DRAWING	UNITS PER CAR	ITEM
F	S	625#		4R-4361	4	Truck Side Frame	42-CS-469
F	S	850#		4R-4362	2	Truck Bolster	42-CS-468
P	S				8	Ride Control Spring	
P	S				8	Friction Wedge	
P	S				8	Friction Plate	
F	S			362-2415	20	Truck Springs (Outer Coil)	3-11/16" Travel
F	S			362-2415	4	Truck Springs (Inner Coil)	3-11/16" Travel
P	S				2	Dead Lever Fulcrum Bracket	

100 CARS "BARBER" TYPE S-2-C SCULLIN

CODE	SOURCE OF SUPPLY	MATERIAL	WEIGHT	PIECE NUMBERS	DRAWING	UNITS PER CAR	ITEM
F	S	625#		4R-4442	4	Truck Side Frame	42-CS-481
F	S	850#		4R-4441	2	Truck Bolster	42-CS-482
P	S				8	Friction Wedge Springs	
P	S				8	Friction Wedge	
P	S				8	Friction Plate	
F	S			362-2415	20	Truck Springs (Outer Coil)	3-11/16" Travel
F	S			362-2415	4	Truck Springs (Inner Coil)	3-11/16" Travel
P	S				2	Dead Lever Fulcrum Bracket	

Revised May 27, 1958

R-40-30

BILL OF MATERIAL FOR CARS IN CLASS

UNDERFRAME

Drwg. 444-4340

R-40-30

BILL OF MATERIAL FOR CARS IN CLASS

CODE	SOURCE OF SUPPLY	MATERIAL	WEIGHT	PIECE NUMBERS	DRAWING	UNITS PER CAR	ITEM
P	S	S		U 1	4R-4344	1	Center Sill
P	S	S		U 2	4R-4344	1	Center Sill
P	S	S		U 3	4R-4344	3	Center Sill Tie Plate
P	S	S		U 4	4R-4344	6	Center Sill Separator
P	S	S		U 5	4R-4345	1	Side Sill Channel
P	S	S		U 6	4R-4345	1	Side Sill Channel
P	S	S		U 7	4R-4345	2	End Sill
P	S	S		U 8	4R-4345	2	End Sill
P	S	S		U 9	4R-4344	2	Center Sill Tie Plate
P	S	S		U 9A	4R-4344	1	Center Sill Tie Plate
P	S	S		U10	4R-4345	2	Bell Crank Fulcrum
P	S	S		U11	4R-4345	1	Diagonal Brace Gusset
P	S	S		U12	4R-4345	1	Diagonal Brace Gusset
P	S	S		U13	4R-4345	1	Diagonal Brace Gusset
P	S	S		U14	4R-4345	1	Diagonal Brace Gusset
P	S	S		U15	4R-4345	2	Corner Conn. Plate
P	S	S		U16	4R-4345	2	Corner Connection
P	S	S		U17	4R-4345	2	Corner Connection
P	S	S		U18	4R-4345	2	Cross Tie
P	S	S		U19	4R-4345	3	Cross Tie
P	S	S		U20	4R-4345	1	Cross Tie
P	S	S		U21	4R-4345	4	Cross Tie
P	S	S		U22	4R-4343	2	Crossbearer
P	S	S		U23	4R-4343	1	Crossbearer
P	S	S		U24	4R-4343	1	Crossbearer
P	S	S		U25	4R-4343	1	Crossbearer
P	S	S		U26	4R-4343	1	Crossbearer
P	S	S		U27	4R-4343	1	Body Bolster
P	S	S		U27A	4R-4343	1	Body Bolster
P	S	S		U28	4R-4343	1	Body Bolster
P	S	S		U28A	4R-4343	1	Body Bolster
P	S	S		U29	4R-4345	1	Bolster Top Cover
P	S	S		U30	4R-4345	1	Bolster Top Cover
P	S	S		U31	4R-4345	1	Cylinder Support
P	S	S		U32	4R-4344	1	Branch Pipe Tee Supt.
P	S	S		U33	4R-4345	3	Valve Support Angle
P	S	S		U34	4R-4345	1	Valve Support Angle
P	S	S		U35	4R-4346	2	Support Angle
P	S	S		U36	4R-4345	1	AB Valve Support
P	S	S		U37	4R-4346	1	Diagonal Brace
P	S	S		U38	4R-4346	1	Diagonal Brace
P	S	S		U39	4R-4346	1	End Sill Angle
P	S	S		U40	4R-4346	1	Deck Plate

12 15/16" "Z" @ 41.2# x 42'-5-3/4"
 12-15/16" "Z" @ 41.2# x 42'-5-3/4"
 5/16" x 3" x 18"
 1-1/2" x 1-1/2" x 1/4" x 12-29/32"
 6" x 2-1/2" x 12# x 41'-1-3/8"
 6" x 2-1/2" x 12# x 41'-1-3/8"
 4" x 4" x 3/8" x 47 11/32"
 4" x 4" x 3/8" x 47 11/32"
 5/16" x 5-1/2" x 26-5/8"
 5/16" x 9-1/2" x 26-5/8"
 7/16" x 6" x 7"
 3/8" x 4" x 4-1/16"
 3/8" x 4" x 4-1/16"
 3/8" x 4" x 4-1/16"
 3/8" x 4" x 4-1/16"
 3/8" x 3-1/8" x 3-1/8"
 3/8" x 5-3/16" x 6"
 3/8" x 5-3/16" x 6"
 5" 6.7# x 50-7/16"
 5" 6.7# x 50-7/16"
 5" 6.7# x 50-7/16"
 5/16" x 12" x 50-7/16"
 5/16" Plt.
 5/16" Plt.
 5/16" Plt.
 5/16" Plt.
 5/16" Plt.
 3/8" Plt.
 3/8" Plt.
 3/8" Plt.
 3/8" Plt.
 3/8" x 20 7/16" x 6'-0"
 3/8" x 36" x 6'-0"
 3/8" x 14-1/2" x 29-7/8"
 3/8" x 3" x 14-5/8"
 3" x 2" x 3/8" x 4"
 5" x 3" x 3/8" x 4"
 3" x 2" x 3/8" x 45-11/16"
 3/8" x 8" x 25-1/2"
 8" x 13.75# x 62-3/4"
 8" x 13.75# x 62-3/4"
 4" x 3" x 3/8" x 9'-1"
 3/8" x 59-1/4" x 9'-6-1/2"

UNDERFRAME

BILL OF MATERIAL FOR CARS IN CLASS

CODE	SOURCE OF SUPPLY	MATERIAL	WEIGHT	PIECE NUMBERS	DRAWING	UNITS PER CAR	ITEM
P	S			U41	4R-4346	1	Angle Cock Support 3/8" x 5" x 10-11/16"
P	S			U42	4R-4346	1	Angle Cock Support 3/8" x 5" x 11-5/8"
P	S			U43	4R-4346	2	Uncoupling Rod Brk't. 3/8" x 5" x 5-3/4"
P	S			U43A	4R-4346	2	Uncoupling Rod Brk't Reinforcement 3/8" x 3" x 9-3/8"
P	S			U44	4R-4346	1	Reservoir Support 7/16" x 6" x 12-3/16"
P	S			U45	4R-4346	1	Reservoir Support 7/16" x 10-11/16" x 12"
P	S			U46	4R-4346	1	Fuel Tank Support 1" x 5-3/4" x 7"
P	S			U47	4R-4346	1	Fuel Tank Support 1" x 3-1/2" x 5-3/4"
P	S			U48	4R-4346	1	Fuel Tank Support 1" x 3-1/2" x 5-3/4"
P	S			U49	4R-4346	1	Fuel Tank Support 1" x 5-3/4" x 7"
P	S			U50	4R-4346	1	Fuel Tank Support 1" x 5-1/4" x 7-1/8"
P	S			U51	4R-4346	1	Fuel Tank Support 1" x 5-1/4" x 7-1/8"
P	S			U52	4R-4346	1	Slack Adjuster Brk't. 3/8" x 8" x 12"
P	S			U53	4R-4346	1	Slack Adjuster Brk't. 1/2" x 8" x 17-3/8"
P	S			U54	4R-4346	1	Slack Adjuster Brk't. 1/2" x 8" x 10-1/16"
P	S			U54A	4R-4346	2	Slack Adjuster Spacer 1/2" x 4" x 4"
P	S			U55	4R-4346	2	Bolster Bottom Tie 3/8" x 22" x 43-1/2"
P	S			U56	4R-4346	4	Side Bearing Wear Plt. 3/8" x 4-3/4" x 16"
P	S			U57	4R-4346	1	Brake Rod Support 1/2" x 2" x 25-3/4"
P	S			U58	4R-4346	1	Brake Rod Support 1/2" x 2" x 16"
P	S			U59	4R-4346	4	Release Rod Guide 2" x 2" x 5/16" x 1-1/2"
P	S			U60	4R-4343	2	Wear Plate Stiffener 4" x 3" x 3/8" x 17-1/16"
P	S			U60A	4R-4343	2	Wear Plate Stiffener 4" x 3" x 3/8" x 17-1/16"
P	S			U61	4R-4343	4	Bolster End Stiffener 3/8" x 6-3/16" x 11-9/16"
P	S			U62	4R-4344	1	Brake Lever Guide 1" Rod x 27-5/8"
P	S			U62A	4R-4344	2	Brake Lever Guide 1" Rod x 27-5/16"
P	S			U63	4R-4344	1	Brake Lever Guide 1" Rod x 23-5/8"
P	S			U64	4R-4344	4	Striker Front Plate 1/2" x 4-5/8" x 15-3/4"
P	S			U65	4R-4344	4	Striker Bar Backer 1/2" x 2-1/4" x 6"
P	S			U66	4R-4344	2	Striker Bar 1-1/2" x 3-1/4" x 18-1/4"
P	S			U67	4R-4344	2	Crosstie Support-Striker 3/8" x 8-1/4" x 18"
P	S			U68	4R-4344	2	Pocket Back Plate 3/8" x 3-1/2" x 10-1/2"
P	S			U69	4R-4344	2	Pocket Back Plate 3/8" x 3-1/2" x 10-1/2"
P	S			U70	4R-4346	2	Fuel Tank Support Stiffener 1/2" x 3" x 7-7/16"
P	S			U71	4R-4346	2	Fuel Tank Support Stiffener 1/2" x 3" x 6-29/32"
P	S			U72	4R-4346	2	Fuel Tank Supprrt Stiffener 1/2" x 3" x 3-15/16"
P	S			U73	4R-4346	2	Fuel Tank Support Stiffener 1/2" x 3" x 3-13/32"
P	S			U74	4R-4346	4	Fuel Tank Support Stiffener 1/2" x 3" x 5-11/16"
P	S			U75	4R-4346	4	Fuel Tank Support Stiffener 1/2" x 3" x 5-5/32"
O	S			201-3254		8	Trunnion Lug
O	S	25#		443-3615		4	Front Draft Gear Stop SI-44-F-343
O	S			F-198	443-3569	2	Body Center Plate
O	S				4R-4409	2	Bolster Center Filler (250 cars) Buckeye
O	S				4R-4367	2	Bolster Center Filler (250 cars) Symington

UNDERFRAME

CODE	SOURCE OF SUPPLY	MATERIAL	WEIGHT	PIECE NUMBERS	DRAWING	UNITS PER CAR	ITEM
M	S			U31	441-2989	2	Sill Step 1/2" x 2" x 52"
MM	S			U32	441-2989	2	Sill Step 1/2" x 2" x 52"
MM	S				1R-4504	2	Sill Step at Door 1/2" x 2" x 91-1/4"
MM	S				341-3778	1	Sill Step at Comp. Door 1/2" x 1-1/2" x 47"
F	S				3R-4488	2	End Sill Handhold Fig. 146.
O	S				41R-4686	4	Body Side Bearing (Forging)
O	S	82#	F-198		443-3569	2	Body Center Plate
O	S	220#			4R-4409	2	Bolster Center Filler (250 cars) Buckeye
O	S	220#			4R-4367	2	Bolster Center Filler (250 cars) Symington
P	S				3R-4555	2	Door Track
P	S				3R-4555	26	Door Track Filler
P	S				3R-4555	2	Closing Kicker Bar 1" x 1-1/4" x 1-1/2" (on Door Track)
P	S			D-1226		2	Door Open Latch

Total Weight-----9,725#
Mfgr..... Gunderson Bros.

BILL OF MATERIAL FOR CARS IN CLASS R-40-30

Revised August 18, 1958

DRAFT RIGGING

CODE	SOURCE OF SUPPLY	MATERIAL	WEIGHT	PIECE NUMBERS	DRAWING	UNITS PER CAR	ITEM
F	S	423#	E-60	203-2346	2	2	Coupler Type E (Rigid Shank Bottom Operated)
F	S	24#		2R-4618	C/S		Coupler Release Rigging "Imperial"
F	S	48#		201-3533	2	2	Draft Gear Key 6" x 1-1/2" x 18-1/2"
P	S			202-3257	2	2	Coupler Centering Device Carrier Iron
P	S			201-3256	4	4	Trunnion Link
P	S			203-3258	4	4	Adjustable Trunnion Pocket
P	S				4	4	Cotter Pins 7/16" x 6"
F	S			202-3538	2	2	Draft Key Retainer - Azee
F	SR	335#		3R-4473	2	2	Draft Gear - Miner RF-333 (400 Cars)
F	S	210#		203-3474	2	2	Coupler Yoke Y-40
M	S			201-3220	2	2	Draft Gear Carrier 8" x 5/8" x 20-3/8"
F	S	335#		3R-4507	2	2	Draft Gears-Cardwell (100 cars) Mark 40
F	S			1R-4524	2	2	Follower Plate Filler 1/2" x 5-3/4" x 6-3/4" (100 cars)
F	S			201-3596	2	2	Follower Plate 2-1/4" x 8-7/8" x 12-1/2"

R-40-30

BILL OF MATERIAL FOR CARS IN CLASS

Revised June 16, 1958
 Revised July 1, 1958
 Revised Aug. 20, 1958

SHEATHING & FRAMING

DRAWING NO. 6R-4575

CODE	SOURCE OF SUPPLY	MATERIAL	WEIGHT	PIECE NUMBERS	DRAWING	UNITS PER CAR	ITEM
					6R-4575	C/S	Sheathing & Framing (Complete)
P	S	S-24994	3R-4576	1	Side Sheet		
P	S	S-24997	3R-4577	1	Side Sheet @ Machine Comp.		
P	S	S-24999	3R-4578	1	Side Sheet		
P	S	S-24998	3R-4579	1	Side Sheet		
P	S	S-24996	3R-4580	1	Side Sheet @ Machine Comp.		
P	S	S-24995	3R-4581	1	Side Sheet		
P	S	S-24993	3R-4582	1	Side Sheet		
P	S	S-25000	3R-4583	2	Side Sheet Below Door		
P	S	L-25002	3R-4584	1	Louvered Side Sheet 14 Ga.		
P	S	L-25001	3R-4585	1	Louvered Side Sheet 14 Ga.		
P	S	S-24989	3R-4586	1	Side Sheet		
P	S	S-25053	3R-4586	1	Side Sheet @ Door		
P	S	S-24990	3R-4587	1	Side Sheet @ Door		
P	S	S-25054	3R-4587	1	Side Sheet		
P	S	S-24991	3R-4588	2	Side Sheet		
P	S	S-24992	3R-4588	3	Side Sheet		
P	S	S-25055	3R-4588	1	Side Sheet		
P	S	S-25056	3R-4588	1	Side Sheet		
P	S	S-25016	1R-4589	1	Door Stop Backing Plt.		
P	S	S-25027	1R-4590	4	Threshold Plate Support		
P	S	S-24987	1R-4591	2	Filler at Door Header		
P	S	S-24986	1R-4592	2	Top Bolting Bracket at Corner Post		
P	S	S-24988	1R-4593	1	Top Ret. Reinf. Plate		
P	S	S-25003	3R-4594	2	Door Post 3-3/8" x 8.3# Zee		
P	S	S-25004	3R-4594	2	Door Post 3-3/8" x 8.3# Zee		
P	S	S-25005	3R-4595	2	Door Header 3-3/8" x 8.3# Zee		
P	S	S-25008	3R-4596	1	Intermediate Post		
P	S	S-25009	3R-4596	1	Intermediate Post		
P	S	S-25010	3R-4597	6	Intermediate Post		
P	S	S-25011	3R-4597	6	Intermediate Post		
P	S	S-25012	3R-4598	1	Intermediate Angle Post		
P	S	S-25013	3R-4598	1	Intermediate Angle Post		
P	S	S-25006	3R-4599	1	Corner Post - "B" End		
P	S	S-25007	3R-4599	1	Corner Post - "B" End		
P	S	S-24954	3R-4601	1	Corner Cap "B" End of Car		
P	S	S-24955	3R-4601	1	Corner Cap "B" End of Car		
P	S	S-24956	3R-4602	1	Corner Cap "A" End of Car		
P	S	S-24957	3R-4602	1	Corner Cap "A" End of Car		
P	S	S-25014	3R-4603	1	Side Sill Angle		
P	S	S-25015	3R-4603	1	Side Sill Angle		

BILL OF MATERIAL FOR CARS IN CLASS R-40-30

SHEATHING & FRAMING

PAGE 8

CODE	SOURCE OF SUPPLY	MATERIAL	WEIGHT	PIECE NUMBERS	DRAWING	UNITS PER CAR	ITEM
P	S	S-23315	131-3877	14	Int. Post & Side Plt. Conn.		
P	S	S-23550	131-4079	4	Door Post & Side Plt. Conn.		
P	S	S-23301	131-3881	4	Bolting Clip at Door & Side Plate Gusset		
P	S	S-25027	131-3882	4	Bolting Clip at Door Post & Side Sill Gusset		
P	S	S-23306	131-3885	2	Bolting Clip at Splice of Steel at Corner Post		
P	S	S-23303	131-3883	4	Inter. & Bottom Bolting Brkt. at Corner Post		
P	S	S-23544	123-4054	2	Door Post & Side Plate Gusset		
P	S	S-23545	123-4054	2	Door Post & Side Plate Gusset		
P	S	S-23546	132-4056	2	Door Post & Side Sill Gusset		
P	S	S-23547	132-4056	2	Door Post & Side Sill Gusset		
P	S	S-17890	121-4052	12	Door Post Bolting Clip		
P	S	S-21001	121-3184	8	Top & Inter. Bolting Clip		
P	S	S-17891	121-2966	2	Side Grab Reinforcement		
P	S	S-25	3R-4555	4	Bumper Reinforcement 1-1/2" x 1-5/8" x 3/16" x 38-7/8"		
P	S	S-16572		4	Standard Filler at Top of Posts		
P	S	S-7037	121-2958	2	Standard Filler		
P	S	S-23416	137-3564	1	Grab Iron Connection		
P	S	22	3R-4555	2	Top Retainer - Over Doorway		
P	S	26	3R-4555	2	Top Retainer - Beyond Doorway		
F	S			1	Filter Panel 48-13/8" x 14 Ga. x 65-3/8" (See Drwg. Index)		
M	S	S-32	2R-4605	1	Corner Post A-End 3-1/2" x 2-1/2" x 3/8" x 10'-2"		
M	S	S-33	2R-4605	1	Corner Reinforcement A-End 1/2" x 1-1/2" x 10'-1-31/32"		
M	S	S-30	2R-4606	1	Filter Panel Header 3-1/2" x 2-1/2" x 3/8" x 50-1/8" 2"		
M	S	S-31	2R-4606	1	Filter Panel Header 3-1/2" x 2-1/2" x 3/8" x 46-3/4"		
M	S	S-11	131-4001	1	Handhold Stile Bracket 1/4" x 2" x 13-5/8"		
M	S	S-12	131-4001	1	Handhold Stile Bracket 1/4" x 1-3/4" x 11-1/8"		
P	S	21	1R-4559	2	Top Roller Stop		
P	S	23	2R-4565	4	Door Bumper No. D-1208		
P	S	13	2R-4567	2	Door Keeper No. D-210		
P	S	14	2R-4567	2	Door Keeper No. D-211		
P	S	27	2R-4568	2	Door Keeper No. D-1223-1		
P	S	28	2R-4568	2	Door Keeper No. D-1224-1		
M	S	S-17	1R-4263	1	Ladder Reinf. 4" x 12 Ga. x 15"		
M	S	S-18	1R-4263	1	Ladder Reinf. 4-1/2" x 12 Ga. x 16"		
M	S	S-13	1R-4624	2	Bolting Clip @ Angle Post 1/4" x 4" x 7"		
M	S	S-14	1R-4624	6	Bolting Clip @ Angle Post 1/4" x 4" x 9-1/2"		
M	S	S-16	1R-4624	4	Bolting Clip @ Top Belt Rail 1/4" x 4" x 6"		

Revised May 27, 1958
July 18, 1958

STEEL ENDS ASSEMBLED

PAGE 9

CODE

SOURCE OF SUPPLY

MATERIAL

WEIGHT

PIECE NUMBERS

DRAWING

UNITS PER CAR

ITEM

Drwg. 4R-4610 & 4R-4612

F	O		4R-4613	1	Top Section	) B End
F	O		4R-4613	1	Bottom Section	)
F	O		4R-4611	1	Top Section	) A End
F	O		4R-4611	1	Bottom Section	)
M	O		1R-4407	1	Brake Step Bracket	1-3/4" x 3/8" x 32"
M	O		1R-4407	1	Brake Step Bracket	1-3/4" x 3/8" x 32"
M	O	S-4	1R-4616	1	Hand Brake Housing Support	4" x 3/8" x 24" 11/16"
M	O	S-5	1R-4616	1	Hand Brake Housing Support	4" x 3/8" x 24" 11/16"
M	O	S-8	1R-4506	2	Run. Bd. Support Brace	1-1/2" x 3/8" x 15-25/32" "A" End
M	O		1R-4551	2	End Run. Bd. Support	3" x 2" x 3/16" x 22-1/2" Angle
M	O		371-3202	1	Retainer Valve Bracket	4" x 1/4" x 5"
M	O	S-9	1R-4506	2	Run. Bd. Support Brace	1-1/2" x 3/8" x 15-25/32" "B" End
M	O		161-3638	1	Retainer Pipe Clamp	3/16" x 1-1/2" x 3-7/8"
M	O		161-3638	1	Retainer Pipe Clamp Bracket	x 1/4" x 1-1/2" x 5-1/2" (Cuts Two)
M	O	S-15	1R-4623	5	Steel End Bolting Strap	3" x 5/16" x 8'-6"

Revised May 27, 1958

MATERIAL

A—Aluminum
B—Brass
C—Copper
R—Rubber
S—Steel Black
W—Wood
G—Galv. Steel

SOURCE OF SUPPLY

F—Furnished complete by an outside manufacturer.
M—Raw material to be purchased and fabricated by PFE.
P—A component part of an item that is furnished complete by an outside manufacturer.
O—An item furnished by one manufacturer to form a part of an assembly furnished by another.
SH—Secondhand, Reclaimed or Reconditioned material.

R-40-30

BILL OF MATERIAL FOR CARS IN CLASS

SIDES & ENDS APPLIED

ITEM DRAWING NO. 6R-4575

							PAGE 10
CODE	SOURCE OF SUPPLY	MATERIAL	WEIGHT	PIECE NUMBERS	DRAWING	UNITS PER CAR	SIDES & ENDS APPLIED
							ITEM DRAWING NO. 6R-4575
F	S			6R-4575	2		Sides (Assembled)
F	S			4R-4610	1		End (Assembled) A End
F	S			4R-4612	1		End (Assembled) B End
F	S	75#		3R-4480	1		End Ladder A End
F	S	75#		3R-4480	1		End Ladder B End
P	R&S				4		Door Bumper
P	S				2		Door Latch
F	S	75#		3R-4480	2		Side Ladders
M	S		S-28	283-3721	2		Placard Board Brkt. - Side 5-3/8" x #12 ga. x 18-1/2"
M	S		S-29	283-3721	2		Placard Board Brkt. - Side 5-3/8" x #12 ga. x 18-1/2"
M	S		S-24	283-3721	2		Commodity Cardboard Brkt. 5-3/8" x #12 ga. x 11-1/4"
M	S		S-25	283-3721	2		Commodity Cardboard Brkt. 5-3/8" x #12 ga. x 11-1/4"
M	W		S-27	283-3721	8		Placard Board - Side and End 1" x 8" x 2'-2-1/8"
M	W		S-26	283-3721	4		Commodity Cardboard 1" x 4-3/8" x 13-3/4"
F	R	1.5#		282-3181	1		Defect Card Holder - "Flexi"
F	S			341-2019	16		G.T. Washers - Style "D" Electro Galv.
F	S	3.9#		3R-4488	2		Side Handholds Fig. 146
F	S	3.9#		3R-4488	2		Door Handholds Fig. #1
F	S	3.9#		3R-4488	1		End Handholds B End Fig. 148
F	S				*2		Extruded Caulking Compound 3/16" Dia. x 13'-10" (Permagum)
F	S	2.9#		3R-4488	1		End Handhold A End Fig. 131
M	S		S-20	371-3324	1		Handhold Brkt. - A End 2" x 1/4" x 11-1/8"
M	S		S-21	371-3324	1		Handhold Brkt. - A End 2" x 1/4" x 16"
M	S		S-22	283-3721	2		Placard Board Brkt. - End 5-1/2" x #12 ga. x 20-9/16"
M	S		S-23	283-3721	2		Placard Board Brkt. - End 5-1/2" x #12 ga. x 20-9/16"
F					16		#221 Yellow Powder Charge)
F					16		1/2" Disc) "Ramset" for securing
F					16		#2326 Drive Pin) placard boards & commodity boards.
F					8		7/8" Disc.)
F					8		#3316 Drive Pin) End Placard Board.
F					4		#223 Purple Powder Charge
F				2R-4384	1		Indicator Light #MRN-57111-11 (Vapor Heating Corp.)
M	S			1R-4383	1		Indicator Light Guard 11-1/4" x 12 ga. x 14-1/2"
F					1		Indicator Light Wire #16 Stranded 11'-0"
F					1		Indicator Light Wire #16 Stranded 14'-0"
F					4		#224 Yellow Powder Charge
F					1		No. 89 "G.E." 12 V. Lamp (Indicator Light)

* See note on page 23

Revised June 11, 1958

BILL OF MATERIAL FOR CARS IN CLASS R-40-30

AIR BRAKES APPLIED

BILL OF MATERIAL FOR CARS IN CLASS R-40-30

CODE	SOURCE OF SUPPLY	MATERIAL	WEIGHT	PIECE NUMBERS	DRAWING	UNITS PER CAR	ITEM	DRAWING NO. 4R-4435
SH	S					1	AB Valve Complete N-3559 (S.H.)	
SH	S					1	Combined Dirt Collector & Cut-Out Cock N-2774 (S.H.)	
SH	S					1	Branch Pipe Tee N-3145 (S.H.)	
SH	S					1	Combined Auxiliary & Emergency Reservoir N-2931 (S.H.)	
SH	S					1	Brake Cylinder N-2779 (S.H.)	
F	S					1	Retainer Valve	
F	S				161-3534	2	Angle Cock	
F	SR				161-4002	2	Air Hose Complete (with FP-5 Coupling, 1-1/4" Nipples & Gasket)	
F	S					1	Cylinder Lever 16-3/4" x 17-1/4"	
F	S					1	Floating Lever 13-1/4" x 13-3/4"	
M	S				163-2546	1	Cylinder & Floating Lever Conn. 1-1/8" x 4'-10" (Rod Only)	
M	S				163-2546	1	Truck & Cyl. Lever Conn. 7/8" Dia. x 9'-7" (Rod Only)	
M	S				163-2546	1	Truck & Flt. Lever Conn. 7/8" Dia. x 17'-9" (Rod Only)	
F	S				161-3266	2	Brake Rod Jaws (for 1-1/8" Dia. Rod) SI No. F-185	
F	S				163-2542	4	Brake Rod Jaws (for 7/8" Dia. Rod) SI No. F-164	
F	S				163-3616	15	Brake Lever Pins 1-3/32" x 3-1/2" Pin No. 1	
F	S				163-3616	4	Truck Lever Conn. Pins 1-7/32" x 3-1/2" Pin No. 36	
F	S				163-3616	1	Brake Lever Pin 1-3/32" x 5-1/8" Pin No. 2	
M	S				2R-4277	2	Release Rod 1/2" Dia. x 6'-3-1/2"	
M	S				2R-4277	2	Release Rod Aux. 1/2" Dia. x 4'-0"	
F	S	2#			161-3113	5	Brake Pipe Anchor - Gustin - Bacon R-27-5	
F	S	.75#			162-3840	2	Retainer Pipe Clamp - Cenco with #285-2 Base	
M	S				161-3638	1	Retainer Pipe Clamp 1-1/2" x 3/16" x 3-1/2"	
M	S				161-3638	1	Retainer Pipe Clamp Base 1/4" x 1-1/2" x 5"	
F	S	75#			3R-4532	1	Brake Slack Adjuster (Universal)	
F	S	12#			161-3216	1	Push Rod 1-3/8" Dia. x 26-1/4"	
M	S					1	Trainline Pipe 1-1/4" x 12'-0"	Extra Heavy
M	S					1	Trainline Pipe 1-1/4" x 5'-4"	Extra Heavy
M	S					1	Trainline Pipe 1-1/4" x 23'-6"	Extra Heavy
M	S					2	Trainline Pipe Nipples 1-1/4" x 10"	Std. Pipe
M	S					1	Branch Pipe 1" x 24"	Extra Heavy
M	S					1	Cylinder to Valve Pipe 3/4" x 3'-0"	Extra Heavy
M	S					2	Reservoir to Valve Pipe 3/4" x 6'-0"	Extra Heavy
M	S					1	Retainer Pipe 3/8" x 3'-2"	Extra Heavy
M	S					1	Retainer Pipe 3/8" x 11'-6"	Extra Heavy
M	S					1	Retainer Pipe 3/8" x 4'-9"	Extra Heavy
M	S					1	Retainer Pipe 3/8" x 11'-0"	Extra Heavy
F	S					4	Coupling 1-1/4"	Extra Heavy
F	S					1	Coupling 3/8"	Extra Heavy
F	S					1	Union Elbow 90° 3/8"	Extra Heavy
M	B				163-3310	1	Badge Plate (Brake Levers)	

Revised July 10, 1958

AIR BRAKES APPLIED

ITEM DRAWING NO. 4R-4435

CODE	SOURCE OF SUPPLY	MATERIAL	WEIGHT	PIECE NUMBERS	DRAWING	UNITS PER CAR
------	------------------	----------	--------	---------------	---------	---------------

F	S
M	S
F	S
F	S
F	S

161-4051
161-3658

2
1
1
*1
1

Cotter Keys 3/8" x 2-1/2"
Release Rod Support 2-1/4" x #12 Ga. x 13-1/4"
Retainer Pipe Clamp - Cenco with #2037M Base
QRR Brake Cyl. Release Valve Complete with Gaskets & Fittings
3/8" Union - Extra Hvy.

* 200 C/S Crearer, Adams
300 C/S N.Y.A.B. Co.

M	S
M	S
F	S
F	S

161-3771
161-3637

2
2
18
4

Branch Pipe Tee Anchor Washer 1-1/4" x 11 Ga. x 2-5/8"
Angle Cock U-Bolt 5/8" Rod x 10"
Cotter Keys 3/8" x 2-1/2" (Lock Tite)
Cotter Keys 5/16" x 1-1/2" (Release Rods)

HAND BRAKES

F	S
F	S
P	S
M	S
F	S
F	S
F	S
M	S
F	S
M	S
P	S
M	S
F	S
F	S
F	S
P	S
F	S
F	S

98#
98#

19#
2#

T
F
F-164
F-139
F-140
Fig.2
Fig.2
No. 5
No. 1
No.
Fig.1

153-2536
154-2541
163-
163-2546
163-2542
162-2543
162-2543
163-2546
161-3174
161-3597
152-2267
161-2762
163-3616
163-3616
161-3171
162-3839

1
1
1
1
1
1
2
1
1
1
1
1
1
1
3
4
1
1
1

Power Unit - Equipco (400 c/s)
Power Unit - Ajax (100 c/s)
Hand Wheel
Conn. Rod (Vertical) 7/8" Dia. (Rod Only) x 8'-4 1/2"
Brake Rod Jaw (for 7/8" Dia. Rod)
Brake Rod Eye (Horiz.) for 7/8" Dia. Rod
Brake Rod Eye (Vert.) for 7/8" Dia. Rod
Connecting Rod (Horiz.) 7/8" Dia. x 16'-8 1/2"
Clevis (Conn. Rod and Conn. Chain)
Connecting Chain
Bell Crank A.A.R. 50
Bell Crank Chain
Pin 1-3/32" x 5-7/8" (Bell Crank Pin)
Pin 1-3/32" x 3-1/2" (Hand Brake Conn.)
Cotters 3/8" x 2-1/2" (Lock-Tite)
Clevis with 11/16" Rivet
Clevis @ Connection Chain
Retainer Pipe Clamp - Cenco-with #2037 Base

Rev. July 18, 1958

R-40-30

BILL OF MATERIAL FOR CARS IN CLASS

FUEL TANK

DRAWING NO. 6R-4435

CODE	SOURCE OF SUPPLY	MATERIAL	WEIGHT	PIECE NUMBERS	DRAWING	UNITS PER CAR	ITEM
F	S	1958#	T-26	383-4226	1		Fuel Tank - Left.
F	S	1958#	T-27	383-4226	1		Fuel Tank - Right
F	S		T-1		2		2" Fill Cap "Buckeye" No. 764
M	S		T-2	1R-4436	1		2" Fuel Tank Filler Pipe (2" Std. Pipe 21") Left Tank
M	S		T-2A	1R-4436	1		2" Fuel Tank Filler Pipe (2" Std. Pipe 21") Right Tank
F	R		T-3	381-4287	2		Filler Hose 2-3/8" ID x 14" Neoprene
F	S		T-4		4		Hose Clamp M-40-S, 2-1/16" to 3" "Aero-Seal"
F	S		T-5	6R-4435	2		2" Street Elbow
F	S		T-6		2		3/4" Vent Cap (Buckeye No. 631)
F	S		T-7	1R-4437	2		Vent Pipe (3/4" x 14-1/2" Std. Pipe)
F	S-R		T-8	6R-4435	8		1/2" Dresser 90° Ell
M	S		T-9	6R-4435	1		1/2" x 60" Std. Pipe (Conn. Tank to Ck.Valve.)
M	S		T-10	6R-4435	1		1/2" x 6'-5-3/8" Std. Pipe (Conn. Tank to Ell)
M	S		T-11	6R-4435	1		1/2" x 14-3/4" Std. Pipe (Ck. Valve to Ell)
M	S		T-13	6R-4435	2		1/2" x 37-3/16" Std. Pipe (Center Sill to Outside Ell)
M	S		T-14	6R-4435	2		2" x 4" Std. Pipe (Filler Hose to St. Ell) threaded one end
M	S		T-15	6R-4435	1		1/2" x 88" Std. Pipe (Outside Ell to Eng. Comp. Ell)
M	S		T-16	6R-4435	1		1/2" x 86" Std. Pipe (Outside Ell to Eng. Comp. Ell)
M	S		T-17	6R-4435	2		1/2" x 3-1/2" Std. Pipe (Eng. Comp. Ell to Eng. Comp. Deck)
F	S		T-18	6R-4435	2		1/2" Std. Pipe Coupling (At T-17)
F	S		T-19	6R-4435	2		1/2" x 1/4" Reducing Brushing (Into T-18)
F	S		T-20	6R-4435	1		1/2" Std. Check Valve (Stockham B-316 125 Lb. Pressure)
F	S		T-21	6R-4435	2		2" Dresser Coupling (Style 65 Reg) (Tank to Conn. Tank)
F	S		T-22	6R-4435	2		1" Dresser Coupling (Style 65 Reg) (Tank to Conn. Tank)
F	S		T-23	6R-4435	2		3/4" Dresser Coupling (Style 65 Reg) (Vent Pipe to Tank)
F	B		T-25	381-3665	2		90° Elbows, "Aeroquip" No. 2003-4-6-B
F	B		T-28	381-38377	2		Fuel Strainer
M	S		T-40	441-3574	4		Fuel Pipe Clamp 1/4" x 1-1/2" x 3-1/2"
M	S		T-41	441-3574	3		Fuel Pipe Clamp Brk't 1-1/2" x 1-1/2" x 1/4" x 4-1/2" angle
M	S		T-42	441-3574	1		Fuel Pipe Clamp Brk't 1-1/2" x 1-1/2" x 1/4" x 12-7/8" angle
M	S		T-43	441-3574	2		Reinforcing Plate 1/4" x 4" x 6-5/8"
F	S		Pin#1	163-3616	6		Forged Pins 1-3/32" x 3-1/2"
F	S				6		Cotter Key 3/8" x 2-1/2" (Lock-Tite)
F		3#		33R-5085	1		Dial Type Fuel Gauge (Liquidometer Model D-6)
F					1		Dial Type Fuel Gauge Gasket (Furnished with Gauge)
F					2		Inlet Check Valve (Buckeye #820-C) 1" Male & 1" Female
P	S				2		1" Cored Pipe Plug

R-40-30

BILL OF MATERIAL FOR CARS IN CLASS

FUEL CONNECTING TANK

Drawing No. 2R-4438

CODE	SOURCE OF SUPPLY	MATERIAL	WEIGHT	PIECE NUMBERS	DRAWING	UNITS PER CAR	ITEM
				T-31	2R-4438	1	Conn. Tank Complete Consists of the following:
M	S			T-31	2R-4438	1	Well Casing 6-5/8" O. D. x 12-3/8"
M	S			T-32	2R-4438	2	Nipple 2" x 5-1/4" (Unthreaded)
M	S			T-33	2R-4438	2	Nipple 1" x 5-13/16" (Unthreaded)
M	S			T-34	2R-4438	1	Baffle 5-15/16" x 1/8" x 12-3/8 Plt.
M	S			T-35	2R-4438	2	Hanger 10" x 1/4" x 16" Plt.
M	S			T-36	2R-4438	1	Strap 2" x 1/4" x 11-7/8" Bar.
M	S			T-37	2R-4438	2	Angle 3" x 2" x 3/8" x 10"
M	S			T-38	2R-4438	1	Std. Pipe 1/2" x 20-5/8"
M	S			T-39	2R-4438	1	Std. Pipe 1/2" x 19-5/8"
				T-40		2	1/2" Dresser Elbow (Style 65)

R-40-30

BILL OF MATERIAL FOR CARS IN CLASS

Revised April 15, 1958

MACHINE COMPARTMENT

ITEM

DRAWING NO. 3R-4472

CODE

SOURCE OF
SUPPLY

MATERIAL

WEIGHT

PIECE
NUMBERS

DRAWING

UNITS PER
CAR

M	S	B-1	2R-4531	3	Bulkhead Post 4" x 13.0# x 10'-4-7/8" "H" Beam
M	S	B-2	2R-4531	1	Bulkhead Post-Side 4" x 8.2# "Z" x 10'-4-7/8"
M	S	B-3	2R-4531	1	Bulkhead Post-Side 4" x 8.2# "Z" x 10'-4-7/8"
M	S	B-4	2R-4530	1	Header 11" x 1/4" x 8'-11-7/8"
M	S	B-5	2R-4530	2	Header End Plate 1/4" x 3-1/2" x 12" 3/4"
M	S	B-6	2R-4530	3	Bulkhead Brace 2-1/2" x 2-1/2" x 3/8" x 44-13/16"
M	S	B-7	2R-4530	3	Bulkhead Brace Plate 3/8" x 4-1/2" x 12"
M	S	B-96	1R-4519	1	Compartment Lining @ Seam Cap 11-5/8" x 12 Ga. x 9'-0-1/4"
M	S	B-77	1R-4519	2	Compartment Lining @ Side 4-13/16" x 12 Ga. x 39-3/4"
M	S	B-8-C	3R-4528	1	Compartment Lining 48" x 12 Ga. x 10'-4" } 175 cars
M	S	B-9-C	3R-4528	1	Compartment Lining 32-1/2" x 12 Ga. x 10'-4" }
M	S	B-10-C	3R-4528	1	Compartment Lining 32-1/2" x 12 Ga. x 10'-4" }
M	S	B-8-E	3R-4527	1	Compartment Lining 48" x 12 Ga. x 10'-4" } 25 cars
M	S	B-9-E	3R-4527	1	Compartment Lining 32-1/2" x 12 Ga. x 10'-4" }
M	S	B-10-E	3R-4527	1	Compartment Lining 32-1/2" x 12 Ga. x 10'-4" }
M	S	B-8-T	3R-4529	1	Compartment Lining 48" x 12 Ga. x 10'-4" } 300 cars
M	S	B-9-T	3R-4529	1	Compartment Lining 32-1/2" x 12 Ga. x 10'-4" }
M	S	B-10-T	3R-4529	1	Compartment Lining 32-1/2" x 12 Ga. x 10'-4" }
F	G			46	3/4" x #10 - 24 Phillips Hd. Steel Thread Cutting Screw Type #1 Pan Hd.
F	R			1	Grommet 1/4" ID to fit 1/2" Hole (General Cement #1043-G)

THERMOMETER

F	S	30#	021-4236	1	Dial Thermometer (American) 4-1/2", Type 6440-RC-7, Range 20/100°F., complete with 110" Stainless Steel Tubing and Mercury Bulb.
F				1	Fiber Tube 3/4" I.D. x 5-1/2"
F	X			4	Plastic Clamps, 1/4" Loop Type.

Revised May 27, 1958

BILL OF MATERIAL FOR CARS IN CLASS R-40-30

SUB FLOOR

ITEM

Drawing No. 3R-4422

CODE

SOURCE OF
SUPPLY

MATERIAL

WEIGHT

PIECE
NUMBERS

DRAWING

UNITS PER
CAR

M	S	F-1	3R-4422	2	Sub Floor 49-3/8" x #12 Ga. x 79-3/16"
M	S	F-2	3R-4422	2	Sub Floor 49-3/8" x #12 Ga. x 79-3/16"
M	S	F-3	3R-4422	4	Sub Floor 49-3/8" x #12 Ga. x 8'-2"
M	S	F-4	3R-4422	2	Sub Floor 49-3/8" x #12 Ga. x 4'-3-1/4"
					Welding Rod as required

STRINGERS & FLOOR

M	W	F-5	3R-4420	2	Floor Stringer 2-3/4" x 6" x 16'-4"
M	W	F-6	3R-4420	2	Floor Stringer 1-5/8" x 6" x 16'-4"
M	W	F-7	3R-4420	2	Floor Stringer 2-3/4" x 6" x 15'-10-1/4"
M	W	F-8	3R-4420	2	Floor Stringer 1-5/8" x 6" x 15'-10-1/4"
M	W	F-9	3R-4420	2	Floor Stringer 2-3/4" x 6" x 4'-11"
M	W	F-10	3R-4420	2	Floor Stringer 1-5/8" x 6" x 4'-11"
M	W	F-6A	3R-4420	1	Floor Stringer 1-5/8" x 6-1/8" x 16'-4"
M	W	F-8A	3R-4420	1	Floor Stringer 1-5/8" x 6-1/8" x 15'-10-1/4"
M	W	F-10A	3R-4420	1	Floor Stringer 1-5/8" x 6-1/8" x 4'-11"
F				C/S	Insulation - Floor (PFE Schedule F-65)
M	W		122-3617	80	Decking 1-3/4" x 5-1/4" x 8'-8-3/8"
M	W	W-30	2R-4654	2	Threshold Filler 2-1/2x5-9/16" x 6'-2-1/2"
M	G		3R-4508	1	Drain Pan "A" End
F	G	10#	023-4062	2	Drain Pan Heater Well
M	G		2R-4509	1	Drain Pan "B" End
F	P		1R-4645	2	Drain Tube
F	G		1R-4644	2	Wind Guard Bracket
F	A		1R-4641	2	Wind Guard
F	S		1R-4646	2	Helical Twist Spring
F	G		1R-4642	2	Wind Guard Bracket Support
F	G		1R-4643	2	Drain Tube Flange
			*	18	Lin. Ft. 1/16" x 2" Caulking Compound (PFE Spec. 801)
				40	Lin. Ft. 1/16" x 1-1/2" 3M Sealer EC 1202 Tape
F	R		1R-4534	2	Rubber Grommets (Drain Spout)
F	S			12	#10 x 1/2" R.H. Self-Tapping Screw
			1R-4503	2	Heater Well Air Lock #16 Ga.

Revised June 11, 1958

* See note on Page 23

BILL OF MATERIAL FOR CARS IN CLASS R-40-30

FRAMING - WALLS

DRAWING NO. 6R-4510

BILL OF MATERIAL FOR CARS IN CLASS E-40-30

CODE	SOURCE OF SUPPLY	MATERIAL	WEIGHT	PIECE NUMBERS	DRAWING	UNITS PER CAR	ITEM
M	W	W-1	3R-4424	2	Door Post 2-1/2" x 4-3/32" x 8'-10-3/4"		
M	W	W-2	3R-4424	2	Door Post 2-1/2" x 4-3/32" x 8'-10-3/4"		
M	W	W-3	3R-4424	1	Door Header 4-11/32" x 4-13/32" x 6'-7-3/4"		
M	W	W-4	3R-4424	1	Door Header 4-11/32" x 4-3/8" x 6'-7-3/4"		
M	HW	W-19	3R-4424	2	Door Post Facing 1-3/8" x 5-1/8" x 8'-10-3/4"		
M	HW	W-20	3R-4424	2	Door Post Facing 1-3/8" x 5-1/8" x 8'-10-3/4"		
M	W	W-5	3R-4431	1	Top Belt Rail - BL 2-5/8" x 4-5/8" x 16'-11-3/8"		
M	W	W-6	3R-4431	1	Top Belt Rail - BR 2-5/8" x 4-5/8" x 16'-11-3/8"		
M	W	W-7	3R-4431	1	Top Belt Rail - AL 2-5/8" x 4-5/8" x 13'-0"		
M	W	W-8	3R-4431	1	Top Belt Rail - AR 2-5/8" x 4-5/8" x 13'-0"		
M	W	W-9	3R-4432	4	Belt Rail 2-5/8" x 4-5/8" x 16'-11-3/8"		
M	W	W-10	3R-4432	4	Belt Rail 2-5/8" x 4-5/8" x 12'-9"		
M	W	W-11	3R-4433	1	Coping Board 2-3/4" x 7-3/4" x 16'-11-3/8"		
M	W	W-12	3R-4433	1	Coping Board 2-3/4" x 7-3/4" x 16'-11-3/8"		
M	W	W-13	3R-4433	1	Coping Board 2-3/4" x 7-3/4" x 12'-9"		
M	W	W-14	3R-4433	1	Coping Board 2-3/4" x 7-3/4" x 12'-9"		
M	W	W-15	1R-4434	5	Vertical End Post 2-11/16" x 5-5/8" x 9'-7" ("B"-end)		
M	W	W-16	1R-4434	20	Sub Lining Nailer, End 1-5/8" x 2-11/16" x 20-3/4" (B-end)		
M	W	W-17	3R-4432	56	Sub Lining Nailer 3/4" x 3-5/8" x 24-3/4" - Side		
M	W	W-18	3R-4432	28	Sub Lining Nailer 3/4" x 3-5/8" x 43" - Side		
M	W	W-21	1R-4434	1	Back Pan Rail 1-3/4" x 2-11/16" x 8'-8-3/8"		
M	PW	W-22	2R-4427	4	Spacer Block 1-1/2" x 3" x 5"		
M	PW	W-23	2R-4427	22	Spacer Block 1-1/4" x 3" x 7-3/4"		
M	PW	W-24	2R-4427	16	Spacer Block 1-1/4" x 4" x 4-3/4" - See Schedule PW-1-W		
M	PW	W-25	2R-4427	44	Spacer Block 1-1/4" x 4" x 7-1/2"		
M	PW	W-26	2R-4427	2	Spacer Block 1-1/4" x 4" x 4"		
F				c/s	Insulation - Walls (Schedule W-68)		
F				c/s	Vapor Barrier - Walls (Schedule VB-2-W)		
F	S			48	2-1/2"- #18 F.H. Wood Screw (Door Post Facing)		
M	W			60	L.Ft. 3/4" x 3/4" Moulding - Sub Lining @ Sub Ceiling		
M	W	W-17A	3R-4432	14	Floor Rack Holder Cripples 3/4" x 6" x 24-3/4"		
F				330	L.Ft. 1/16" x 1-1/2" 3M Sealer EC-1202 (Sub Lining & Ceiling Jts)		
F				110	L.Ft. 1/16" x 2" 3M Sealer EC-1202 (Sub Lining & Ceiling Jts)		
M	W			1	Horizontal Nailer - Bottom B-end 1-3/4" x 2-11/16" x 8'-6-1/2"		
				51	L.Ft. 1/16" x 2" Caulking Compound (Door Header, Floor Pan)		
					(Door Flashing, Side Door)		

Revised May 27, 1958
 Revised June 24, 1958
 Revised August 20, 1958

A END WOOD FRAMING

BILL OF MATERIAL FOR CARS IN CLASS R-40-30

CODE	MATL	PIECE NUMBERS	DRAWING	UNITS PER CAR	ITEM
Carrier Car 4R-5667 - 4R-5666 CARS 100003- 100027					
SH					R & R INSULATION
M	W	B-11	3R-5669	1	Bottom Belt 2-3/4" x 5-5/8" x 8'-7-1/8"
M	W	B-13	3R-5669	1	Top Belt @ Evap. 2-3/4" x 5-5/8" x 8'-7-1/8"
M	W	B-14	3R-5669	1	Bottom Belt @ Blower 2-3/4" x 5-5/8" x 8'-7-1/8"
M	W	B-15	3R-5669	1	Top Belt 2-3/4" x 5-5/8" x 8'-7-1/8"
M	W	B-12	3R-5669	1	Bottom Belt @ Evap. 2-3/4" x 5-5/8" x 7'-9-1/16"
M	W	B-18	3R-5669	1	Inter. Post-Right Side 2-3/4" x 3-5/8" x 51'-5/16"
M	W	B-16	3R-5669	1	Bottom Post-Side 2-3/4" x 3-5/8" x 31'-1/8"
M	W	B-17	3R-5669	3	Bottom Post-Center 2-3/4" x 4-5/8" x 31'-1/8"
M	W	B-19	3R-5669	1	Inter. Post-Side 2-3/4" x 3-5/8" x 15'-3/16"
M	W	B-20	3R-5669	3	Inter. Post-Center 2-3/4" x 4-5/8" x 15'-3/16"
M	W	B-21	3R-5669	4	Post @ Blower 2-3/4" x 3-5/8" x 15'-1/2"
M	W	B-22	3R-5669	5	Post Above Evap. 2-3/4" x 3-5/8" x 8'-9/16"
M	W	B-23	3R-5669	5	Vertical Nailer 1-5/8" x 3-5/8" x 10"
M	W	B-25	3R-5669	2	Nailer 3/4" x 2-3/4" x 20'-7/8"
M	W	B-26	3R-5669	2	Nailer 3/4" x 2-3/4" x 21'-5/8"
M	W	B-10	R-5671	1	Intermediate Belt 2-3/4" x 2-3/4" x 8'-7-1/8"
M	W	B-50	2R-4548	3	Spacer Blocks 1-1/8" x 5" x 12"
M	W	B-51	2R-4548	1	Spacer Blocks 1-1/8" x 3-5/8" x 12"
M	W	B-52	2R-4548	6	Spacer Blocks 1-1/8" x 3-5/8" x 4"
M	W	B-53	2R-4548	3	Spacer Blocks 1-1/8" x 5" x 9"
M	W	B-54	2R-4548	2	Spacer Blocks 1-1/8" x 3-5/8" x 9"
M	W	B-55	2R-4548	3	Spacer Blocks 1-1/8" x 5" x 11-3/4"
M	W	B-56	2R-4548	2	Spacer Blocks 1-1/8" x 3-5/8" x 11-3/4"
M	W	B-57	2R-4548	4	Spacer Blocks 3/4" x 5" x 9"
M	W	B-57-A	2R-4548	4	Spacer Blocks 1" x 5" x 9"
M	W	B-58	2R-4548	2	Spacer Blocks 3/4" x 3-5/8" x 9"
M	W	B-58-A	2R-4548	2	Spacer Blocks 1" x 3-5/8" x 9"
M	W	B-59	2R-4548	2	Spacer Blocks 3/4" x 3-5/8" x 9"
M	W	B-59-A	2R-4548	2	Spacer Blocks 1" x 3-5/8" x 9"
M	W	B-60	2R-4548	2	Spacer Blocks 3/4" x 5" x 5-5/8"
M	W	B-60-A	2R-4548	2	Spacer Blocks 1" x 5" x 5-5/8"

REVISION

A END WOOD FRAMING

PAGE 18A

BILL OF MATERIAL FOR CARS IN CLASS R-40-30

CODE	MATL	PIECE NUMBERS	DRAWING	UNITS PER CAR	ITEM	CARS 100003 - 100027		
M	W	L-29	2R-5682	1	Plywood Sub Lining	1/4" x 27-3/16"	x 73-3/4"	
M	W	L-30	2R-5682	1	Plywood Sub Lining	1/4" x 48"	x 73-3/4"	
M	W	L-31	2R-5682	1	Plywood Sub Lining	1/4" x 27-3/16"	x 73-3/4"	
M	W	L-32	2R-5682	1	Plywood Sub Lining	1/4" x 28-1/2"	x 23"	
M	W	L-33	2R-5682	1	Plywood Sub Lining	1/4" x 28-1/2"	x 23"	
M	W	L-34	2R-5682	1	Plywood Sub Lining	1/4" x 5-5/8"	x 45-3/8"	
M	W	L-35	2R-5682	1	Plywood Sub Lining	1/4" x 1-3/4"	x 45-3/8"	
M	W	L-36	2R-5682	1	Plywood Sub Lining	1/4" x 10"	x 8'-6-3/8"	
M	W	L-8	2R-5672	1	Blower Panel	1" x 43"	x 8'-2-3/4"	
M	W	L-9	2R-5672	1	Evaporator Panel	1" x 28-3/8"	x 8'-2-3/4"	
M	W	L-10	2R-5672	1	Bottom Panel	1" x 35"	x 8'-2-3/4"	
F	G	B-66	3R-5668	1	Bulkhead Reinforcement - Left Side			
F	G	B-67	3R-5668	1	Bulkhead Reinforcement - Right Side			
F	G	B-65	3R-5668	2	Bulkhead Reinforcement - Extension			
F	G	B-69	3R-5668	3	Bulkhead Reinforcement - Top			
F	G	B-68	3R-5668	3	Bulkhead Reinforcement - Bottom			
SH					R & R Metal Sub Lining			
SH					R & R Fan Outlet Diffuser			
M	W			1	Refrigerant Line Box Lining (1/4" S.H. Plywood)			

REVISION

A-END FRAMING

ITEM TRANE CARS - 3R-4537

CODE	SOURCE OF SUPPLY	MATERIAL	WEIGHT	PIECE NUMBERS	DRAWING	UNITS PER CAR	
	M	W		B-11	3R-4538	1	Bottom Belt 2-3/4" x 5-5/8" x 8'-7-1/8"
	M	W		B-14	3R-4538	1	Inter. Belt-Top 2-3/4" x 5-5/8" x 8'-7-1/8"
	M	W		B-15	3R-4538	1	Top Belt 2-3/4" x 5-5/8" x 8'-7-1/8"
	M	W		B-21	3R-4538	2	Top Post-Side 2-3/4" x 3-5/8" x 15-1/2"
	M	W		B-22	3R-4538	2	Top Post-Center 2-3/4" x 4-5/8" x 15-1/2"
	M	W		B-24	3R-4538	2	Top Nailer-Side 1" x 2-3/4" x 21-1/8"
	M	W		B-25	3R-4538	2	Top Nailer-Center 1" x 2-3/4" x 19-7/8"
	M	W		B-26	3R-4538	1	Bottom Belt @ Evap. 2-3/4" x 5-5/8" x 8'-0-9/16"
	M	W		B-27	3R-4538	1	Top Belt @ Evap. 2-3/4" x 5-5/8" x 8'-7-1/8"
	M	W		B-28	3R-4538	1	Inter. Belt 2-3/4" x 3-5/8" x 8'-7-1/8"
	M	W		B-29	3R-4538	1	Bottom Post-Side 2-3/4" x 3-5/8" x 23-1/2"
	M	W		B-30	3R-4538	1	Bottom Post-Right Side 2-3/4" x 3-5/8" x 42-3/8"
	M	W		B-31	3R-4538	3	Bottom Post-Center 2-3/4" x 4-5/8" x 23-1/2"
	M	W		B-32	3R-4538	1	Inter. Post @ Evap. Side 2-3/4" x 3-5/8" x 13-1/4"
	M	W		B-33	3R-4538	3	Inter. Post @ Evap. Center 2-3/4" x 4-5/8" x 13-1/4"
	M	W		B-34	3R-4538	2	Inter. Post-Side 2-3/4" x 3-5/8" x 18-3/16"
	M	W		B-35	3R-4538	3	Inter. Post-Center 2-3/4" x 4-5/8" x 18-3/16"
	M	W		B-36	3R-4538	5	Vertical Nailer-Side 1-5/8" x 3-5/8" x 8-9/16"
	M	W			1R-4359	1	Refrigerant Line Box Lining (1/4" S.H. Plywood)
						c/s	For Spacer Block see Schedule PW-1-W
	F	G		B-61	3R-4544	1	Bulkhead Reinforcement - Side
	F	G		B-62	3R-4544	1	Bulkhead Reinforcement - Side
	F	G		B-63	3R-4544	3	Bulkhead Reinforcement - Bottom
	F	G		B-64	3R-4544	3	Bulkhead Reinforcement - Top
	F	G		B-65	3R-4544	2	Bulkhead Reinforcement Extension
	M	G		B-70	2R-4688	1	48" x 20 Ga. x 52" Metal Lining at Evaporator
	M	G		B-71	2R-4688	2	37-3/4" x 20 Ga. x 52" Metal Lining at Evaporator
	M	G		L-13	122-3561	1	Metal Sub Lining at Blower 22-3/8" x 24 Ga. x 51"
	M	W			2R-4620	C/S	"A" End Lining - Plywood (Schedule PW-1-W)
	M	G		C-25	2R-4659	1	Fan Outlet Diffuser 35" x 24 Ga. x 24"
	M	G		C-26	2R-4659	1	Fan Outlet Diffuser 30-1/2" x 24 Ga. x 24"

BILL OF MATERIAL FOR CARS IN CLASS R-40-30

Revised June 11, 1958
 Rev. June 24, 1958

A - END FRAMING

ITEM CARRIER CARS - 3R-4535

CODE	SOURCE OF SUPPLY	MATERIAL	WEIGHT	PIECE NUMBERS	DRAWING	UNITS PER CAR	
M	W			B-11	3R-4536	1	Bottom Belt 2-3/4" x 5-5/8" x 8' - 7-1/8"
M	W			B-12	3R-4536	1	Inter. Belt 2-3/4" x 5-5/8" x 7' - 9-1/16"
M	W			B-13	3R-4536	1	Inter. Belt 2-3/4" x 5-5/8" x 8' - 7-1/8"
M	W			B-14	3R-4536	1	Inter. Belt Top 2-3/4" x 5-5/8" x 8' - 7-1/8"
M	W			B-15	3R-4536	1	Top Belt 2-3/4" x 5-5/8" x 8' - 7-1/8"
M	W			B-16	3R-4536	1	Bottom Post - Side 2-3/4" x 3-5/8" x 34-1/2"
M	W			B-17	3R-4536	3	Bottom Post - Center 2-3/4" x 4-5/8" x 34-1/2"
M	W			B-18	3R-4536	1	Inter. Post - Right 2-3/4" x 3-5/8" x 62-13/16"
M	W			B-19	3R-4536	1	Inter. Post - Side 2-3/4" x 3-5/8" x 22-11/16"
M	W			B-20	3R-4536	3	Inter. Post - Center 2-3/4" x 4-5/8" x 22-11/16"
M	W			B-21	3R-4536	2	Top Post - Side 2-3/4" x 3-5/8" x 15-1/2"
M	W			B-22	3R-4536	2	Top Post - Center 2-3/4" x 4-5/8" x 15-1/2"
M	W			B-23	3R-4536	5	Vertical Nailer 1-5/8" x 3-5/8" x 10"
M	W			B-24	3R-4536	4	Top & Bottom Nailer - Side 1" x 2-3/4" x 21-1/8"
M	W			B-25	3R-4536	4	Top & Bottom Nailer - Center 1" x 2-3/4" x 19-7/8"
M	W				1R-4359	1	Refrigerant Line Box Lining (1/4" S.H. Plywood)
						c/s	For Spacer Blocks see Schedule PW-1-W
F	G			B-65	3R-4608	2	Bulkhead Reinforcement Extension
F	G			B-66	3R-4608	1	Bulkhead Reinforcement - Side
F	G			B-67	3R-4608	1	Bulkhead Reinforcement - Side
F	G			B-68	3R-4608	3	Bulkhead Reinforcement
F	G			B-69	3R-4608	3	Bulkhead Reinforcement
M	G				2R-3643	1	48" x 20 Ga. x 72" Metal Lining at Evaporator
M	G				2R-3643	2	36" x 20 Ga. x 72" Metal Lining at Evaporator
M	G			L-13	122-3561	1	Metal Sub Lining at Blower 22-3/8" x 24 Ga. x 51"
					2R-4619	C/S	"A" End Lining - Plywood (Schedule PW-1-W)
F	G					1	Evaporator Metal Sheet 30" x 24 Ga. 86"
M	W				1R-4653	5	Filler at Evaporator 2" x 2" x 27-1/4"
M	W				1R-4653	1	Filler at Evaporator 2" x 2" x 8'-0"
F	G					22	Wood Screw 2-1/2" x #14 Galv. F.H.
M	G			C-84	021-3525	2	Fan Outlet Diffuser 27" x 24 Ga. x 35-1/2"
M	G			B-70	1R-4264	1	Baffle at Evaporator 8" x 20 Ga. x 12-1/4"
M	G			B-71	1R-4264	1	Baffle at Evaporator 8" x 20 Ga. x 13"

 Revised June 11, 1958
 Revised July 18, 1958

BILL OF MATERIAL FOR CARS IN CLASS E-40-30

UPPER FRAMING & CEILING

ITEM DRAWING NO. 6R-4510

R-40-30

BILL OF MATERIAL FOR CARS IN CLASS

CODE	SOURCE OF SUPPLY	MATERIAL	WEIGHT	PIECE NUMBERS	DRAWING	UNITS PER CAR	ITEM
M	W			C-4	2R-4429	12	Carline 2-3/4" x 4-5/8" x 8'-11-1/8"
M	W			C-5	2R-4429	1	Carline - B End 2-7/8" x 4-5/8" x 8' - 11-1/8"
M	W			C-11	2R-4429	60	Sub Ceiling Nailer 1-5/8" x 2-5/8" x 33-1/4"
M	W			C-10		12	Sub Ceiling 5/16" x 36" x 103-1/4" (Schedule P-3-S)
M	S			C-2	121-3674	24	Carline Bracket 2-1/2" x 1/4" x 7"
M	S			C-3	121-3674	24	Carline Bracket Washer 2" x 12 Ga. x 2"
M	G			C-6	121-3692	33	Ceiling Hanger 2" x 12 Ga. x 8-3/4"
M	G			C-7	121-3692	6	Ceiling Nailer Conn. 2-5/8" x 12 Ga. x 7-3/4"
M	G			C-8	121-3692	3	Ceiling Nailer Conn. 2" x 1/4" x 5"
M	S				1R-4506	1	Sub Ceiling 5/16" x 5-3/4" x 103-1/4" (Schedule P-3-S)
F						C/S	Roof Insulation (Schedule R-67)
F						C/S	Reflective Insulation (Schedule P-1-R)
M	W			C-17	2R-4505	2	Ceiling Nailer - Side 1-5/8" x 1-5/8" x 11'-10-7/8"
M	W			C-18	2R-4505	2	Ceiling Nailer-Side 1-5/8" x 1-5/8" x 16'-9-3/8"
M	W			C-16	2R-4505	3	Ceiling Nailer 1-3/4" x 2-5/8" x 27"
M	W			C-13	2R-4505	3	Ceiling Nailer 1-3/4" x 2-5/8" x 9'-3-1/16"
M	W			C-15	2R-4505	3	Ceiling Nailer 1-3/4" x 2-5/8" x 9'-3-13/16"
M	W			C-14	2R-4505	3	Ceiling Nailer 1-3/4" x 2-5/8" x 15'-4"
M	A			C-24	1R-4622	2	Doorway Flashing 8-3/4" x 10 Ga. x 6'-7 3/4" (Alloy 3003-H-12)
F	A			C-84	2R-4373	16	Ceiling, Alum. Roofing, Diamond Patt. 24" x .040" x 98-7/8"
F	A			C-85	2R-4373	1	Ceiling, Alum. Roofing, Diamond Patt. 31" x .040" x 98-7/8"
F	A			C-82	1R-4372	16	Extrusion, Alum. 98-3/4"
F	A			C-83	1R-4372	2	Extrusion, Alum. 98-3/4"
F	C				041-3525	2	Fan Outlet Diffuser 25" x 26 Ga. x 35-1/4"
F	A				1R-4305	56	Diffuser, Alum. .040" x 4"
F	G					16	Metal Screw 2" #16 R.H. Galv. (Doorway Flashing)
F	A					289	Wood Screw 3/4" #10 P.H. Alum. Phillips Head (Ceiling)
F	A					102	Wood Screw 1" #10 P.H. Alum. Phillips Head (Extrusion)
F	A					225	Metal Screw 1/2" # 10 Phillips Head Self Tapp. (Diffuser)
M	PW					1	Panel @ Blower (See Schedule PW-1-W)
M	PW						

Revised June 12, 1958
Rev. June 24, 1958

LINING

BILL OF MATERIAL FOR CARS IN CLASS R-40-30

CODE	SOURCE OF SUPPLY	MATERIAL	WEIGHT	PIECE NUMBERS	DRAWING	UNITS PER CAR	ITEM
M	W			L-28	1R-4498	c/s	Pressed Wood Sub Lining (Schedule P-3-S)
M	W			L-26	1R-4498	5	Lining Nailer 7/8" x 3-5/8" x 8'-2-5/16" (B-End)
M	PW					24	Lining Nailer 31/32" x 3-5/8" x 8'-8"
M	W			122-3617		c/s	B-End Lining (Schedule PW-1-W)
M	B	1#		1R-4415		c/s	T&G Lining - Side Wall 25/32" x 3-1/4"
F	S			2R-4633		2	Chest Handle "Adlake" No. 77 Cast Bronze
F	G			3R-4640		28	Floor Rack Hinge Butt
F	G			3R-4640		14	Floor Rack Holder Base & Pin
F	S	2#		3R-4533		14	Floor Rack Holder Hook
F	G					24	Lading Strap Anchor
M	G					42	#14 x 1-3/4" R.H. Wood Screws (F.R. Holder Base)
M	W			L-27	1R-4498	14	Filler @ Floor Rack Holder 31/32" x 8" x 8"
M	W					1	Flashing at B-End 16" x 20 Ga. x 120"
M	W					4	Lining Nailer 31/32" x 5-5/8" x 8'-8"
M	G					C/S	Wall Flue Filler - Side 13/32" x 1-1/2" x 59 Lin. Ft. (Redwood)
M	G					1	Wall Flue Filler - End 5/16" x 1-1/2" x 8'-6-1/2" (Redwood)
M	G					1	16" x 20 Ga. x 111" Sheet (B-end pan)
M	G					1	48" x 20 Ga. x 72" Sheet (A-end)
M	G					2	36" x 20 Ga. x 72" Sheet (A-end)
F						35	Lin.Ft. 1/16" x 2" x 2" 3M sealer EC-1202 tape

Revised May 27, 1958

STEEL ROOF

DRAWING NO. 4R-4545

CODE	SOURCE OF SUPPLY	MATERIAL	WEIGHT	PIECE NUMBERS	DRAWING	UNITS PER CAR	ITEM
P		G			1R-4635	10	Intermediate Sheet #14 Ga. Galv.
P		G			1R-4636	1	End Sheet - "A" End #14 Ga. Galv.
P		G			1R-4637	1	End Sheet - "B" End #14 Ga. Galv.
P		S			1R-4638	10	Seam Cap
P		S			1R-4639	1	Special Seam Cap
P		G			1R-4512	6	Inter. Running Board Saddle
P		G			1R-4514	2	End Running Board Saddle
P		G			1R-4513	5	Splice Running Board Saddles
P		S			1R-4483	20	Side Plate Fillers - Regular
P		S			1R-4484	2	Side Plate Fillers - Special
F		S			3R-4488	2	Roof Handhold Fig. 149.
F					* 104		Lin.Ft. Caulking Compound 1/16" x 1" (Permagum or equal)
M		S		R-3	1R-4511	4	End Lat. Section Support @ ZU Plt. 3/8" x 2" x 8"
M		S		R-2	1R-4511	2	End Lat. Section Support 5" x 1/4" x 9-3/4"
F		S	380#		4R-4543	C/S	Running Board - Morton
F		S			3R-4411	1	Brake Step - Morton

* If bought in bulk a total of 5/8 Gal. per car will be required.

Revised May 27, 1958

BILL OF MATERIAL FOR CARS IN CLASS R-40-30

WATERPROOF FLOOR

CODE	SOURCE OF SUPPLY	MATERIAL	WEIGHT	PIECE NUMBERS	DRAWING	UNITS PER CAR	ITEM
F	W					C/S	Floor Covering (Schedule P -3-S) 3/16" Pressed Wood Waterproofing (See page 35)
F						90 L.Ft.	3M Sealer EC-1202 1/16" x 2" tape.
F	S						Nails (See Nail List)
M	W	W-29		2R-4654	2		Threshold Strip 1-5/8" x 5-9/16" x 6'-1"
M	G	F-15		1R-4655	2		Threshold Flashing 8-3/4" x 12 Ga. x 6'-7"
F						60 L.Ft.	3M Sealer EC-1202 1/16" x 1-1/2" tape
F	G				24		Wood Screws 1-1/2" x #10 Galv. F.H. (Threshold Flashing)
M	G			1R-4656	C/S		Floor Flashing 2-1/2" x 2-1/2" x #24 Gal. Galv. 60 Lin. Ft.
					24		1" x 3/4" - 20 Style D, Type 1, Slotted Flat Head, Self tapping metal screws galv. (Threshold Flashing)
F	R	7#		122-3790	2		Threshold Plate 1/2" x 3-1/4" x 6'-7"
F	G				44		1" x 1/4" - 20 Type #1 Slotted F.H. Steel Thread Cutting Screw

R-40-30

BILL OF MATERIAL FOR CARS IN CLASS

Revised June 11, 1958

MATERIAL
A—Aluminum
B—Brass
C—Copper
R—Rubber
S—Steel Black
W—Wood
G—Galv. Steel

SOURCE OF SUPPLY
F—Furnished complete by an outside manufacturer.
M—Raw material to be purchased and fabricated by PFE.
P—A component part of an item that is furnished complete by an outside manufacturer.
O—An item furnished by one manufacturer to form a part of an assembly furnished by another.
SH—Secondhand, Reclaimed or Reconditioned material.

SIDE DOOR

DRAWING NO. 4R-4570

BILL OF MATERIAL FOR CARS IN CLASS R-40-30

CODE	SOURCE OF SUPPLY	MATERIAL	WEIGHT	PIECE NUMBERS	DRAWING	UNITS PER CAR	ITEM
	P	S		1	3R-4553	2	Framing & Panel
	P	S		2	2R-4563	2	Cam Operating Rod Assembly R.H.
	P	S		3	2R-4563	2	Cam Operating Rod Assembly L.H.
	P	S		4	3R-4571	2	Upper & Lower Crank Assembly with Kicker Lug
	P	S		5	3R-4571	2	Upper & Lower Crank Assembly
	P	S		6	2R-4561	4	Operating Rod Bearing S-27 & S-29
	P	S		7	2R-4561	12	Operating Rod Bearing S-27 & S-28
	P	S		8	2R-4562	8	Operating Rod Bearing Guide
	P	S		9	4R-4572	2	Operating Lever L.H. DF-1214-1
	P	S		10	4R-4572	2	Operating Lever R.H. DF-1214
	P	S		11	1R-4557	2	Door Lever Holder
	P	S		12	1R-4560	2	Door Handle
	P	S		15		4	Roller Assembly
	P	S		16		16	1/8" Alemite Fittings
	P	S			1R-4558	2	Lever Lock
	P	S			1R-4556	2	Seal Lock
	P	S			2R-4564	4	Upper Crank Arm
	P	S			2R-4566	4	Lower Crank
	M	W	D-1	4R-4526	2	2	Door Stile 2-3/16" x 6-1/16" x 8'-8-3/8"
	M	W	D-2	4R-4526	2	2	Door Stile 2-3/16" x 6-1/16" x 8'-8-3/8"
	M	W	D-3	4R-4526	4	4	Top & Bottom Rail 1-7/8" x 6-1/16" x 5'-8-1/2"
	M	W	D-4	4R-4526	2	2	Intermediate Post 1-11/16" x 3-5/8" x 8'-4-5/8"
	M	W	D-5	4R-4526	4	4	Aux. Door Stile 2-1/4" x 2-13/16" x 9'-2"
	M	W	D-6	4R-4526	4	4	Aux. Door Rail 2-1/4" x 2-13/16" x 6'-0-7/8"
	M	W	D-7	2R-4427	8	8	Spacer Block 1-1/2" x 4" x 4" (Schedule PW-1-W)
	F				C/S		Insulation (Schedule W-68)
	M				C/S		Sub Lining-Pressed Wood (Schedule P-3-S)
	M	W	D-8	1R-4604	4	4	Lining Nailer 1-3/4" x 2-5/8" x 8'-1-5/8" Hardwood
	M	W	D-9	1R-4604	2	2	Lining Nailer Inter. 31/32" x 3-5/8" x 8'-8-3/8"
	F	W		122-3617	C/S		Lining 25/32" x 3-1/4" T&G
	F	R			C/S		Door Seal
	F	G			40	40	Wood Screw 3" x #16 Galv. F.H. (Lining Nailers)
	F				76	76	Ft. EG. 1202 1/16" x 1-1/2" (To seal door framing)
	M	G	D-23	181-3325	4	4	Door Protection Strip 2" x 12 Ga. x 5'-11"
	F						1 lb. Std. Artic Cup Grease No. 2

Revised May 27, 1958
 Rev. June 24, 1958

MECH. REFRIG. UNIT-CARRIER

CODE	SOURCE OF SUPPLY	MATERIAL	WEIGHT	PIECE NUMBERS	DRAWING	UNITS PER CAR
------	------------------	----------	--------	---------------	---------	---------------

ITEM

DRWG. 4R-4650

100328 - 100502

P	S			4R-4649	1	Evaporator Coil Assembly
P	S			123-4029	1	Blower Assembly
P	S			4R-4652	1	Condensing Unit Assembly
P	S			4R-4648	1	Refrigeration Control Panel Assembly
P	S				1	Static Pressure Differential Switch
F	S			6R-4552	1	Engine & Alternator Assembly (Witte)
P					1	Electrical Control Panel
F		62#			1	Battery 12 Volt Heavy Duty "Sonotone" No. 60M-320
F					1	Battery Cable 58" Long
F					1	Battery Cable Terminal
F					1	Battery Cable Lug (Crescent No. 1467-A)
F					2	NCP-8 Nylon Clamp, Loop Type, Size 1/2" (Sensing Element)
M	S	BB-1		123-3849	1	Battery Box Cover 5-1/4" x 12 Ga. x 3/4"
M	S	BB-2		123-3849	2	Battery Box Side Angle 1-1/2" x 1-1/2" x 1/4" x 35-1/4"
M	S	BB-3		123-3849	2	Battery Box Side Strap 1/4" x 1-1/2" x 19-3/4"
M	S	BB-4		123-3849	2	Battery Box End Angle 1-1/2" x 1-1/2" x 1/4" x 5-9/16"
M	S	BB-5		123-3849	2	Battery Box End Angle 1-1/2" x 1-1/2" x 1/4" x 3-1/16"
M	S	BB-6		123-3849	2	Battery Box Back Strap 1/4" x 1-1/2" x 16"
M	W			123-3849	C/S	Battery Box Fillers (S.H. 1/4" Plywood)
P	S				1	Muffler - Witte
M	S			321-4003	1	Muffler U-Bolt 3/8" x 10"
M	S				1	Muffler Mounting Angle 1-1/2" x 1-1/2" x 1/4" x 50"
F	R			283-4113	1	Log Book Holder - Flexi
F				2-1/2 Gal.		Anti-Freeze (Prestone or equal)
F				24 Qts.		Oil, Heavy Duty S.A.E. 30
M	S			1R-4337	1	Service Manual Holder 12-1/2" x 18 Ga. x 16-3/8"
F					1	Eye Shield, Swift No. A-1 Depth 3/8" Thickness .030
M	S			1R-4338	1	Eye Shield Holder 12" x 18 Ga. x 16-3/4"
P				3R-4428	1	Drain Pan Heater Assembly
F	R				1	Drain Pan Heater Rubber Foot 8'-3" Long
F				1 Pkg.		Lockfoam - Regular No. B-402-SS (540 cu.in.)
F					2	Flexible Fuel Line (Aeroquip Hose #152400-6-12)
F	R			1R-4647	1	Gasket, Neoprene 3/16" x 6-1/2" x 10-7/8"
M	G			1R-4419	2	Gasket Strip 1" x 12 Ga. Galv. x 4-1/2"
M	G			1R-4419	2	Gasket Strip 1" x 12 Ga. Galv. x 10-7/8"
M	R				1	Gasket 1/8" x 1" x 32" (Cuts 4)
F	S				12	3/4" x #10 Self Tapp. R.H. Metal Screw (for Gasket)
F	G				12	1/2" x #14 Self Tapp. P.H. Metal Screw (Heater Hinge)
M	S			1R-4518	1	Capsule Can Holder 3" x 18 Ga. Galv. x 14"
M	S			1R-4518	1	Capsule Can Holder Spring 1/2" x #18 Ga. x 3"
M	G	1		022-4010	2	Battery Cable Clamp 1" x 16 Ga. Galv. x 3"
F					1	Capsule Can

Revised May 27, 1958

" Aug. 20, 1958

BILL OF MATERIAL FOR CARS IN CLASS E-40-30

MECH. REFRIG. UNIT-CARRIER

ITEM Car No's. 100328 - 100502

BILL OF MATERIAL FOR CARS IN CLASS R-40-30

M	G	2	022-4010	3	Wire Harness Clamp 1" x 16 Ga. Galv. x 3"
M	G	3	022-4010	3	Clamp 1/8" x 7/8" x 3-3/4"
M	G	6	022-4010	1	Split Cup Washer 3" x 20 Ga. Galv. x 3"
M	G	7	022-4010	3	Cup Washer 16 Ga. Galv. x 2-3/8" Round
M	G		1R-4264	1	Air Baffle at Evap. 9" x 24 Ga. Galv. x 12-1/4"
M	G		1R-4264	1	Air Baffle at Evap. 9" x 24 Ga. Galv. x 9"
F	G			4	#10 x 1-3/4" R.H. Wood Screw (Air Baffle)
F	G			4	1/4" - 20 x 1/2" R.H. Stove Bolt
F				1	3/8" x 1/2" Hex. Hd. Cap Screw (Condensing Ground Strap)
F				1	"Packard" No. EG-8-8 Ground Strap - Heavy Duty
F				1	"Packard" No. 5L-11-11 Ground Strap - Heavy Duty
F				1	Fuse Holder HMH with SFE 9 Amp. Fuse
M	G		1R-4489	1	Thermometer Bulb Bracket 1" x 12 Ga. Galv. x 13"
F	G			4	1/2" x #10 R.H. Metal Screw (Bulb Bracket)
F				1	Flexible Exhaust Pipe 2-1/2" ID x 54-1/2"
M	S		322-3846	1	Exhaust Vent Hood 7-5/8" x 12 Ga. x 12"
M	S		322-3846	1	Exhaust Vent Hood Base 4-1/4" x 12 Ga. x 6-1/2"
M	S		322-3846	2	Exhaust Vent Backing Plate 7-1/2" x 12 Ga. x 7-1/2"
F				1	Exhaust Vent Asbestos Gasket 7" x 1/8" x 7"
F				1/2	Roll 2" Tape (Prestite #165 Cork Mystic)
M	S		1R-4479	1	Suction Line Support 2-1/2" x 12 Ga. x 18-1/4"
F	S			1	Pipe Clamp, Ideal "Hy-Gear" Size 28
F	G			4	3/4" x #10 - 24 Phillips Hd. Steel Thread Cutting Screw, Type #1
F	R			1	Gasket-Rubber 3/16" x 2" x 2" (Sensing Probe) (Pan Hd.)
F	S			4	Washer 7/32" ID
F				1	Plastic Holder for Form 271-4
F				3	Insulated Ring Tongue Terminals Sta-Kon No. RC-261
F				25	Insulated Ring Tongue Terminals Sta-Kon No. RC-363
F				1	Ring Tongue Terminal Sta-Kon No. C-10-516
F	S			1	2-3/4" Dia. x 4" Steel Tubing, 1/16" Wall Thickness (at Muffler)
F	S			1	Std. Pipe 2-1/2" Dia. x 8-3/4" Long (Exhaust Vent)
F	S			1	Extra Heavy Pipe 2-1/2" Dia. x 3-1/2" Long (at Muffler)
				1	Battery Ground Strap "Belden" 7-1122 with 82-A terminal
				1	Unit Ground Strap "Belden" 7-0894, 1/2" Hole on each end
				4	5/16" x 1" Type "Z" Hex. Hd. Metal Screw, Plated (Sensing Probe)

Revised June 11, 1958

July 18, 1958

" Aug. 20, 1958

MECH. REFRIG. UNIT - CARRIER

PAGE 28

REVISION

REVISION

CODE	MATL	PIECE NUMBERS	DRAWING	UNITS PER CAR	ITEM	Car No's. 100003 - 100027
			3R-5676	1	Evaporator Fan & Motor Assembly	
			4R-5677	1	Evaporator Coil Assembly	
			4R-5678	1	Condensing Unit Assembly	
			4R-5681	1	Refrig. Control Panel Assembly	
			4R-4541	1	Temperature Control Box	
			6R-4552	1	Engine & Alternator Assembly (Witte)	
			R-5683	1	Cover Plate 6-3/4" x 11" x 16 Ga. OHS.	
				18	#12 x 3/4 Rd. Slotted Hd. Bright Metal Screw	
			R-5686	1	Gasket 6-3/4" x 11" x 3/16" Neoprene	
			R-5687	1	Filter Panel	
F	S		6R-4552	1	Engine & Alternator Assembly (Witte)	
F				1	Battery 12 Volt Heavy Duty	
F				1	Battery Cable 58" Long	
F				1	Battery Cable Terminal	
F				1	Battery Cable Lug (Trade #821)	
M	S	BB-1	123-3849	1	Battery Box Cover 5-1/4" x 12 Ga. x 3/4"	
M	S	BB-2	123-3849	2	Battery Box Side Angle 1-1/2" x 1-1/2" x 1/4" x 35-1/4"	
M	S	BB-3	123-3849	2	Battery Box Side Strap 1/4" x 1-1/2" x 19-3/4"	
M	S	BB-4	123-3849	2	Battery Box End Angle 1-1/2" x 1-1/2" x 1/4" x 5-9/16"	
M	S	BB-5	123-3849	2	Battery Box End Angle 1-1/2" x 1-1/2" x 1/4" x 3-1/16"	
M	S	BB-6	123-3849	2	Battery Box Back Strap 1/4" x 1-1/2" x 16"	
M	W		123-3849	C/S	Battery Box Fillers (S.H. 1/4" Plywood)	
P	S			1	Muffler - Witte	
M	S		321-4003	1	Muffler U-Bolt 3/8" x 10"	
F			1R-5441	1	Calibrating Thermometer Receptacle Assembly	
M	S			1	3" x 3" x 1/4" x 53" Bulkhead Step Angle	
			023-3614	1	Dial Thermometer (American) Type 6440 RC-7 (Surplus from R-70-5 cars)	

MECH. REFRIG. UNIT.- CARRIER

PAGE 29

BILL OF MATERIAL FOR CARS IN CLASS

REVISION

CODE	MATL	PIECE NUMBERS	DRAWING	UNITS PER CAR	ITEM
					Car No's. 100003 - 100027
M	S			1	Muffler Mounting Angle 1-1/2" x 1-1/2" x 1/4" x 50"
F	R			1	Log Book Holder - Flexi
F			2-1/2 Gal.		Anti-Freeze (Prestone or equal)
F			24 Qts.		Oil, Heavy Duty S.A.E. 30
M	S		1R-4337	1	Service Manual Holder 12-1/2" x 18 Ga. x 16-3/8"
F				1	Eye Shield, Jackson J-1 8" x .030"
M	S		1R-4338	1	Eye Shield Holder 12" x 18 Ga. x 16-3/4"
F				2	NCP-8 Nylon Clamp, Loop Type, Size 1/2" (Sensing Element)
F				2	Flexible Fuel Line (Aeroquip Hose #152400-6-12)
M	S		1R-4518	1	Capsule Can Holder 3" x 18 Ga. Galv. x 14"
M	S		1R-4518	1	Capsule Can Holder Spring 1/2" x #18 Ga. x 3"
M	G	1	022-4010	2	Battery Cable Clamp 1" x 16 Ga. Galv. x 3"
M	G	2	022-4010	3	Wire Harness Clamp 1" x 16 Ga. Galv. x 3"
M	G	3	022-4010	3	Clamp 1/8" x 7/8" x 3-3/4"
M	G	6	022-4010	1	Split Cup Washer 3" x 20 Ga. Galv. x 3"
M	G	7	022-4010	3	Cup Washer 16 Ga. Galv. x 2-3/8" Round
M	G			1	Air Baffle at Evap. 9" x 24 Ga. Galv. x 12-1/4"
M	G			1	Air Baffle at Evap. 9" x 24 Ga. Galv. x 9"
F	G			4	#10 x 1-3/4" R.H. Wood Screw (Air Baffle)
F	G			4	1/4" - 20 x 1/2" R.H. Stove Bolt
F				1	3/8" x 1/2" Hex. Hd. Cap Screw (Condensing Ground Strap)
F				1	"Packard" No. EG-8-8 Ground Strap - Heavy Duty
F				1	"Packard" No. 5L-11-11 Ground Strap - Heavy Duty
F				1	Fuse Holder HMM with SFE 9 Amp. Fuse
M	G		1R-4489	1	Thermometer Bulb Bracket 1" x 12 Ga. Galv. x 13"
F	G			4	1/2" x #10 R.H. Metal Screw (Bulb Bracket)
F				1	Flexible Exhaust Pipe - 2-1/2" x 54-1/2"
M	S		322-3846	1	Exhaust Vent Hood 7-5/8" x 12 Ga. x 12"
M	S		322-3846	1	Exhaust Vent Hood Base 4-1/4" x 12 Ga. x 6-1/2"
M	S		322-3846	2	Exhaust Vent Backing Plate 7-1/2" x 12 Ga. x 7-1/2"
F				1	Exhaust Vent Asbestos Gasket 7" x 1/8" x 7"
M				1	Exhaust Vent Pipe 2-1/2"
F				1	Capsule Can
F	S			1	2-3/4" Dia. x 4" Steel Tubing, 1/16" Wall Thickness (at Muffler)
F	S			1	Std. Pipe 2-1/2" Dia. x 8-3/4" Long (Exhaust Vent)
F	S			1	Extra Heavy Pipe 2-1/2 Dia. 3-1/2" Long (at Muffler)

MECH. REFRIG. UNIT-TRANE

ITEM Car No's. 100028 - 100327

CODE	SOURCE OF SUPPLY	MATERIAL	WEIGHT	PIECE NUMBERS	DRAWING	UNITS PER CAR	
P	S					1	Compressor, Model 28523LY
P	S					1	Condenser Coil
P	S					1	Condenser Fan
P	S					1	Condenser Fan Motor
P	S					1	Receiver
P	S					1	Flexible Hose
P	S					1	Dual Pressure Switch
P	S					1	Static Pressure Differential Switch
F	S					1	Engine & Alternator Assembly (Witte)
P						1	Electrical Control Panel
F			62#			1	Battery 12 Volt Heavy Duty
F						1	Battery Cable 58" Long
F						1	Battery Cable Terminal
F						1	Battery Cable Lug (Trade #821)
F						1	Battery Cable 10' Long
M	S	BB-1		123-3849		1	Battery Box Cover 5-1/4" x 12 Ga. x 34"
M	S	BB-2		123-3849		2	Battery Box Side Angle 1-1/2" x 1-1/2" x 1/4" x 35-1/4"
M	S	BB-3		123-3849		2	Battery Box Side Strap 1/4" x 1-1/2" x 19-3/4"
M	S	BB-4		123-3849		2	Battery Box End Angle 1-1/2" x 1-1/2" x 1/4" x 5-9/16"
M	S	BB-5		123-3849		2	Battery Box End Angle 1-1/2" x 1-1/2" x 1/4" x 3-1/16"
M	S	BB-6		123-3849		2	Battery Box Back Strap 1/4" x 1-1/2" x 16"
M	W			123-3849	C/S		Battery Box Fillers (S.H. 1/4" Plywood)
P	S					1	Muffler - Witte
M	S			321-4003		1	Muffler U-Bolt 3/8" x 10"
M	S					1	Muffler Mounting Angle 1-1/2" x 1-1/2" x 1/4" x 50"
F	R		4.75#	283-4113		1	Log Book Holder - Flexi
F				2-1/2 Gal.			Anti-Freeze (Prestone or equal)
F				24 Qts.			Oil, Heavy Duty S.A.E. 30
M	S			1R-4337		1	Service Manual Holder 12-1/2" x 18 Ga. x 16-3/8"
F						1	Eye Shield, Jackson J-1 8" x .030"
M	S			1R-4338		1	Eye Shield Holder 12" x 18 Ga. x 16-3/4"
P						1	Drain Pan Heater Assembly
F	R					1	Drain Pan Heater Rubber Foot 8'-3" Long
F						1 Pkg.	Lockfoam - Regular No. B-402-SS (540 Cu.in.)
F						2	Flexible Fuel Line (Aeroquip Hose #152400-6-12)
F	R			1R-4647		1	Gasket, Neoprene 3/16" x 6-1/2" x 10-7/8"
M	G			1R-4419		2	Gasket Strip 1" x 12 Ga. Galv. x 4-1/2"
M	G			1R-4419		2	Gasket Strip 1" x 12 Ga. Galv. x 10-7/8"
M	R					1	Gasket 1/8" x 1" x 32" (Cuts 4)
F	S					12	3/4" x #10 Self Tapp. R.H. Metal Screw (for Gasket)
F	G					12	1/2" x #11 Self Tapp. P.H. Metal Screw (Heater Hinge)

Revised May 27, 1958
July 18, 1958

BILL OF MATERIAL FOR CARS IN CLASS R-40-30

MECH. REFRIG. UNIT-TRANE

ITEM Car No's. 100028 - 100327

CODE	SOURCE OF SUPPLY	MATERIAL	WEIGHT	PIECE NUMBERS	DRAWING	UNITS PER CAR	
M	G				1R-4518	1	Capsule Can Holder 3" x 18 Ga. Galv. x 14"
M	S				1R-4518	1	Capsule Can Holder Spring 1/2" x #18 Ga. x 3"
M	G			1	022-4010	2	Battery Cable Clamp 1" x 16 Ga. Galv. x 3"
M	G			2	022-4010	3	Wire Harness Clamp 1" x 16 Ga. Galv. x 3"
M	G			3	022-4010	3	Clamp 1/8" x 7/8" x 3-3/4"
M	G			6	022-4010	1	Split Cup Washer 3" x 20 Ga. Galv. x 3"
M	G			7	022-4010	4	Cup Washer 16 Ga. Galv. x 2-3/8" Round
M	G					1	Air Baffle at Evap. 9" x 24 Ga. Galv. x 12-1/4"
M	G					1	Air Baffle at Evap. 9" x 24 Ga. Galv. x 9"
F	G					4	#10 x 1-3/4" R.H. Wood Screw (Air Baffle)
F	G					4	1/4" - 20 x 1/2" R.H. Stove Bolt
F						1	3/8" x 1/2" Hex. Hd. Cap Screw (Condensing Ground Strap)
F						1	"Packard" No. EG-8-8 Ground Strap - Heavy Duty
F						1	"Packard" No. 5L-11-11 Ground Strap - Heavy Duty
F						1	Fuse Holder HHM with SFE 9 Amp. Fuse
M	G				1R-4489	1	Thermometer Bulb Bracket 1" x 12 Ga. Galv. x 13"
F	G					4	1/2" x #10 R.H. Metal Screw (Bulb Bracket)
F						1	Flexible Exhaust Pipe 2-1/2" x 62-1/4"
M	S				322-3846	1	Exhaust Vent Hood 7-5/8" x 12 Ga. x 12"
M	S				322-3846	1	Exhaust Vent Hood Base 4-1/4" x 12 Ga. x 6-1/2"
M	S				322-3846	2	Exhaust Vent Backing Plate 7-1/2" x 12 Ga. x 7-1/2"
F						1	Exhaust Vent Asbestos Gasket 7" x 1/8" x 7"
F						1	Capsule Can
F	S					2	NCP-8 Nylon Clamp, Loop Type, Size 1/2" (Sensing Element)
F	S					1	2-3/4" Dia. x 4" Steel Tubing, 1/16" Wall Thickness(at Muffler)
F	S					1	Std. Pipe 2-1/2" Dia. x 8-3/4" Long (Exhaust Vent)
F	S					1	Extra Heavy Pipe 2-1/2" Dia. x 13-1/2" Long (at Muffler)
						12	RC-363 Sta-Kon Terminal

Revised June 11, 1958
 " Aug. 20, 1958

BILL OF MATERIAL FOR CARS IN CLASS R-40-30

R-40-30

BILL OF MATERIAL FOR CARS IN CLASS

CODE	SOURCE OF SUPPLY	MATERIAL	WEIGHT	PIECE NUMBERS	DRAWING	UNITS PER CAR	MACH. COMPARTMENT DOOR	
							ITEM	DRAWING NO. 4R-4470
					3R-4490	1	Mech. Compartment Door Complete with the following:	
				1		1	Top Edge	
				2		1	Front Edge	
				3		1	Rear Edge	
				4		1	Center Vertical Reinf.	
				5		1	Bottom Edge	
				6		2	Top Retaining Clip 2" x 3/16" x 2-7/8"	
				7		2	Door Hanger R-380-S	
				8		2	Hanger Backing Plate 3-7/8" x 1/4" x 6-7/8"	
				9		2	Roller Bearing Roller MS-61	
				10	132-4039	1	Door Lock R-381-S	
				11	131-4037	1	Sealing Cam & Door Hook	
				12	131-4036	1	Lock Lever R-383-S	
				13		1	Front Reinf. Stop Brkt.	
				15		1	Top Retaining Z-Bar	
				16		1	Retaining Angle	
				20		1	Door Track 3" x 1/2" x 7'-7"	
				21	131-4041	3	Track Brkt. R-386	
				22	131-4042	3	Track Brkt. R-385	
				23	11R-4546	1	Back Stop CM-215	
				24		1	Top Z-Bar	
				25		1	Rear Edge Guide Plate	
					137-3564	1	Handhold Stile	
				Fig. 4	3R-4488	2	Side Handhold	
				S-6	1R-4607	2	Handhold Brkt. 1/4" x 5" x 8-1/2"	
					2R-4474	1	R-430 Spring Assembly	

Revised April 15, 1958
Revised July 18, 1958

FLOOR RACK

							FLOOR RACK			PAGE 33
CODE	SOURCE OF SUPPLY	MATERIAL	WEIGHT	PIECE NUMBERS	DRAWING	UNITS PER CAR	ITEM			
M	W	A	4R-4521	2	Special Slat		1-1/8" x 7-5/16" x 48-3/4"			
M	W	B	4R-4521	2	Special Slat		1-1/8" x 7-5/16" x 48-3/4"			
M	W	FF	4R-4521	2	Special Slat		1-1/8" x 7-5/16" x 48-3/4"			
M	W	GG	4R-4521	2	Special Slat		1-1/8" x 7-5/16" x 48-3/4"			
M	W	C	4R-4521	2	Special Slat		1-1/8" x 7-5/16" x 49-11/16"			
M	W	D	4R-4521	2	Special Slat		1-1/8" x 7-5/16" x 49-11/16"			
M	W	HH	4R-4521	2	Special Slat		1-1/8" x 7-5/16" x 49-11/16"			
M	W	JJ	4R-4521	2	Special Slat		1-1/8" x 7-5/16" x 49-11/16"			
M	W	E	4R-4521	10	Floor Rack Slat - End		1-1/8" x 3-5/8" x 50-5/16"			
M	W	F	4R-4521	10	Floor Rack Slat - End		1-1/8" x 3-5/8" x 50-5/16"			
M	W	G	4R-4521	7	Floor Rack Slat @ Hinge		1-1/8" x 3-5/8" x 48-1/16"			
M	W	H	4R-4521	7	Floor Rack Slat @ Hinge		1-1/8" x 3-5/8" x 48-1/16"			
M	W	J	4R-4521	7	Floor Rack Slat @ Hinge		1-1/8" x 3-5/8" x 48-1/16"			
M	W	K	4R-4521	7	Floor Rack Slat @ Hinge		1-1/8" x 3-5/8" x 48-1/16"			
M	W	L	4R-4521	7	Floor Rack Slat @ Handhold		1-1/8" x 3-5/8" x 49-13/16"			
M	W	M	4R-4521	7	Floor Rack Slat @ Handhold		1-1/8" x 3-5/8" x 49-13/16"			
M	W	N	4R-4521	18	Floor Rack Slat		1-1/8" x 3-5/8" x 50-5/16"			
M	W	O	4R-4521	18	Floor Rack Slat		1-1/8" x 3-5/8" x 50-5/16"			
M	W	P	4R-4521	25	Floor Rack Slat		1-1/8" x 3-5/8" x 50-5/16"			
M	W	Q	4R-4521	25	Floor Rack Slat		1-1/8" x 3-5/8" x 50-5/16"			
M	W	R	4R-4521	1	Special Slat - Gate Section		1-1/8" x 6-11/16" x 48-3/4"			
M	W	S	4R-4521	1	Special Slat - Gate Section		1-1/8" x 6-11/16" x 48-3/4"			
M	W	T	4R-4521	1	Special Slat - Gate Section		1-1/8" x 6-11/16" x 49-9/16"			
M	W	U	4R-4521	1	Special Slat - Gate Section		1-1/8" x 6-11/16" x 49-9/16"			
M	W	V	4R-4521	2	End Slat - Gate Section		1-1/8" x 3-5/8" x 50-5/16"			
M	W	W	4R-4521	2	End Slat - Gate Section		1-1/8" x 3-5/8" x 50-5/16"			
M	W	X	4R-4521	4	Slat - Gate Section		1-1/8" x 3-5/8" x 50-5/16"			
M	W	XX	4R-4521	1	Slat @ Gate Section Handhold		1-1/8" x 3-5/8" x 45-15/16"			
M	W	Y	4R-4521	4	Slat - Gate Section		1-1/8" x 3-5/8" x 50-5/16"			
M	W	YY	4R-4521	1	Slat @ Gate Section Handhold		1-1/8" x 3-5/8" x 45-15/16"			
M	W	Z	4R-4521	5	Slat - Gate Section		1-1/8" x 3-5/8" x 50-5/16"			
M	W	AA	4R-4521	5	Slat - Gate Section		1-1/8" x 3-5/8" x 50-5/16"			
M	W	BB	4R-4521	1	Special Slat - Gate Section		1-1/8" x 6-11/16" x 48-3/4"			
M	W	CC	4R-4521	1	Special Slat - Gate Section		1-1/8" x 6-11/16" x 48-3/4"			
M	W	DD	4R-4521	1	Special Slat - Gate Section		1-1/8" x 6-11/16" x 49-9/16"			
M	W	EE	4R-4521	1	Special Slat - Gate Section		1-1/8" x 6-11/16" x 49-9/16"			
F	S	1	4R-4614	2	Stringer @ Hinge		1/8" x 4" x 52"			
F	S	2	4R-4614	2	Stringer @ Hinge		1/8" x 4" x 52"			
F	A	3	4R-4615	4	Floor Rack Stringer		4" Aluminum I Beam 49-7/8"			
F	A	4	4R-4615	4	Floor Rack Stringer		4" Aluminum I Beam 47-13/16"			

BILL OF MATERIAL FOR CARS IN CLASS R-40-30

FLOOR RACK

BILL OF MATERIAL FOR CARS IN CLASS R-40-30

CODE	SOURCE OF SUPPLY	MATERIAL	WEIGHT	PIECE NUMBERS	DRAWING	UNITS PER CAR	ITEM
F	A			5	4R-4615	4	Floor Rack Stringer 4" Aluminum I Beam 45-11/16"
F	A			6	4R-4615	4	Floor Rack Stringer 4" Aluminum I Beam 43-7/16"
F	S			7	4R-4614	3	Stringer @ Hinge 1/8" x 4" x 49-1/8"
F	S			8	4R-4614	3	Stringer @ Hinge 1/8" x 4" x 49-1/8"
F	A			9	4R-4615	24	Floor Rack Stringer 4" Aluminum I Beam 48-15/16"
F	S			10	4R-4614	1	Stringer at Hinge 1/8" x 4" x 51-3/8"
F	S			11	4R-4614	1	Stringer at Hinge 1/8" x 4" x 51-3/8"
F	S			12	4R-4614	1	Stringer @ Hinge 1/8" x 4" x 43-1/2"
F	S			13	4R-4614	1	Stringer @ Hinge 1/8" x 4" x 43-1/2"
F	A			14	4R-4615	2	Floor Rack Stringer 4" Aluminum I Beam 53-3/16"
F	A			15	4R-4615	2	Floor Rack Stringer 4" Aluminum I Beam 55-3/8"
F	A			16	4R-4615	2	Floor Rack Stringer 4" Aluminum I Beam 57-1/2"
F	A			17	4R-4615	2	Floor Rack Stringer 4" Aluminum I Beam 59-3/4"
F	A			18	4R-4615	2	Floor Rack Stringer 4" Aluminum I Beam 51-13/16"
F	A			19	4R-4615	2	Floor Rack Stringer 4" Aluminum I Beam 37-1/16"
F	A			20	4R-4615	2	Floor Rack Stringer 4" Aluminum I Beam 35-1/8"
F	A			21	4R-4615	2	Floor Rack Stringer 4" Aluminum I Beam 33"
F	A			22	4R-4615	2	Floor Rack Stringer 4" Aluminum I Beam 30-3/4"
F	A			23	4R-4615	2	Floor Rack Stringer 4" Aluminum I Beam 29-5/8"
F	A			24	4R-4615	2	Floor Rack Stringer 4" Aluminum I Beam 29-11/16"
F	A			25	4R-4615	2	Floor Rack Stringer 4" Aluminum I Beam 31-11/16"
F	A			26	4R-4615	2	Floor Rack Stringer 4" Aluminum I Beam 33-3/4"
F	A			27	4R-4615	2	Floor Rack Stringer 4" Aluminum I Beam 36"
F	A			28	4R-4615	2	Floor Rack Stringer 4" Aluminum I Beam 37-1/8"
F	A			29	4R-4615	2	Floor Rack Stringer 4" Aluminum I Beam 45-5/16"
F	A			30	4R-4615	2	Floor Rack Stringer 4" Aluminum I Beam 47-7/16"
F	A			31	4R-4615	2	Floor Rack Stringer 4" Aluminum I Beam 49-11/16"
F	S				2R-4617	28	Floor Rack Hinge
F	G			F-13	2R-4525	4	Gate Section Hinge
F	A			F-14	2R-4525	12	Gate Section Hinge (Alloy 6151-T6)
F	S	2.25#			3R-4640	14	Floor Rack Holder Hook Plate
F	G					28	#14 x 1" RD. HD. Galv. Wood Screws for Hook Plate
F	G			34	2R-4629	1	Slat Reinforcement 5-1/2" x 1/8" x 29-9/16"
F	G			32	2R-4629	1	Slat Reinforcement 5-1/2" x 1/8" x 38-3/4"
F	G			35	2R-4629	1	Slat Reinforcement 5-1/2" x 1/8" x 29-9/16"
F	G			33	2R-4629	1	Slat Reinforcement 5-1/2" x 1/8" x 38-3/4"
F	W			22	4R-4521	2	Handhold Filler 1-1/8" x 2-3/8" x 5"
						344	1-1/2" #14 Csk. Flat Head, Type Z, Cadmium Plated Screws
						1268	1-1/2" #14 Csk. Flat Head, Type Z, Stainless Steel (Type 305 18-8)

PROTECTIVE COATINGS

P.F.E.
SPEC.
NO.

PER CAR
QUANTITY

ITEM

R-40-30

409	17 Gal.	Asphalt Coating (Underframe, Outside Steel End, Sub Floor - Under Side)
415	65 Gal.	Asphalt Coating (Inside Steel Sheathing, B End, Bulkhead Struct., Inside Steel Posts)
419	5 Gal.	Primer Roof Coating
402	1-3/4 Gal.	Aluminum Paint - (Roof)
404	3 Gal.	Black Enamel (Trucks) (Brake Rigging)
423	1/4 Gal.	Black Stencil Paint
410	17-1/2 Gal.	Floor Coating
400	1/2 Gal.	Chromate Primer (Bhd. Lining, Bhd. Struct. Members)
	1-3/4 Gal.	Rust-Oleum (Metal Sub-Floor)
700	16 Gal.	Cement - Rubber (Masonite Floor)
800	2 Gal.	Cement - Heavy (Seam Cap Ends, Bolster Cover Plate & Diaphragm)
424	1/4 Gal.	Lap Joint Paint (Metal to Metal Contact)
416	1/2 Pt.	Aluminum Paint - Asphalt Base (End Stenciling)
426	1-1/2 Gal.	Gray (Mach. Compartment Walls & Ceiling)
407	2-3/4 Gal.	Orange Enamel - Undercoat (Sides)
408	2-3/4 Gal.	Orange Enamel (Finish - Sides)
	1/2 Lb.	Putty - Natural
	2-1/4 Lbs.	Putty - Water (Dry State)
	1/2 Gal.	Perma-Dri (Non-Skid) Mach. Compartment Floor
414	16 Gal.	Thinner - Standard
405	6 Gal.	Varnish - Interior Car (2 Coats) Lining & Bhd. Pad & Floor Rack Slat
406	1/2 Gal.	Wood Primer (Inside of A End Lining)
422	1 Pt.	White Stencil Paint
401	3/4 Gal.	Zinc Neutralizer & Conditioner (Roof Sheets)
425	16 Gal.	Wood Preservative (Coping Board, Decking, Decking Nailers, Floor Rack Stringers)
	1/2 Gal.	Quick Drying Cement-EC-524 (Door Gaskets)
	24 Gal.	SMR 512 Coating (Sub Floor - Top, and Top of Floor Insulation)
	2 Gal.	Cement, EC-1128 or Equal (For Use with Sealing Tapes)
	2-1/2 Gal.	Sealer, Plastic - Cocoon #1000 or Equal (Metal Posts)
	1/4 Gal.	Cleaning Solvent for Plastic Sealer
802	1-3/5 Gal.	Metal Seam Caulking Compound "Prestite"

NAIL LIST

<u>Weight Per Car</u>	<u>Size</u>	<u>Gauge</u>	<u>Length</u>	<u>Location</u>
1#	6d	13	1-7/8"	Bolt Head Locks
4#	6dgalv.		2"(Common Nail)	Masonite to Decking
30#	8d	11-1/2	2-3/8"	Sub-Lining Nailers to Belts Lining Nailers to Sub-Lining Nails T&G Lining to Nailers
1#	10d	11	2-7/8"	Bulkhead Pad "B" End
7#	12d	10	3-1/8"	Ceiling Nailers to Carline Lining Nailers to Belts Door Rails to Stiles
28#	20d	7	3-3/4"	Decking to Stringers

<u>Weight Per Car</u>	<u>Size</u>	<u>Type</u>	<u>Length</u>	<u>Location</u>
4#	5/32"	Ring Shank - Galv.	1-3/4"	Floor Pans to Decking & Framing
3#	#11	Barbed Roofing Galv.	1"	Flashing to Coping Board
2#		Staples #1018 CXR Galv. Duo-Fast		Door Seal
1-1/2#	#10	Spiral Shank Galv. (7/16" Head)-1-3/4"		Galv. Lining to Bulkhead Sub Lining at Blower

<u>No. Per Car</u>			
5105	1-1/4"	Chisel Point Divergent Staples (Spot Nail No. HD-10 DCR)	Masonite to Decking 1795 Masonite Sub Lining 2084 Masonite Ceiling 1226

NOTE: All nails to be cement coated sinkers unless otherwise specified.

Revised August 26, 1958

E-40-30

END WELDED STUD LIST

PAGE 37

For Modified Cars 100003 to 100027 Carriers

R-40-30

BILL OF MATERIAL FOR CARS IN CLASS

REVISION

CODE	MATL	PIECE NUMBERS	DRAWING	UNITS PER CAR	ITEM
Per Car	Size	Type	Nut	Washer	Location
3	#10 - 24 x 1-1/2"	(AW) PD	Flex Lock	-	Air Switch
12	5/16" - 18 x 3/4"	(AW) PD	#4	-	Thermostat Sensing Elements
					Thermostat Securement
					Thermometer to Steel Side
6	3/8" - 16 x 1"	(AW) PD	#4	-	Battery Cable Clamp to Steel End
					Power Cable Clips
20	1/2" - 13 x 1"	(AW) PD	#4	-	Filter Panel to Car
12	1/2" - 13 x 1-1/2"	(AW) PD	#4	-	DRC Panel, Control Panel
40	1/2" - 13 x 5-1/2"	(AW) FB	#4	9/16"	Floor Stringers to Sub Floor
33	5/8" - 11 x 2-1/4"	(AW) FB	#4	11/16"	Spacer Blocks to Side Post
20	5/8" - 11 x 4"	(AW) FB	#4	11/16"	"B" End Bolting Strap
40	5/8" - 11 x 4-1/4"	(AW) FB	#4	11/16"	Coping Board to Side Post
2	1/2" - 13 x 3-1/2"	(AW) FB	#4	9/16"	Top Belt to Clips AL & AR
NOTE: Above studs are for 500 car sets.					
55	1/2" - 13 x 4"	A	Flange		"A" End Belt Rails to "H" Beam
12	1/2" - 13 x 4-1/2"	A	Flange		Top Belts "A" End to "H" Beam
4	1/2" - 13 x 1-1/2"	A	#4		Electrical Control Panel
4	1/2" - 13 x 1-1/2"	A	#4		Refrig. Control Panel
4	5/16" - 18 x 3/4"	A	#4		Thermostat Sensing Element
4	5/16" - 18 x 3/4"	A	#4		Thermostat Securement
47	1/2" - 13 x 4"	FB	#4	9/16"	Bulkhead Posts (175 Carrier)
10	1/2" - 13 x 4-7/8"	FB	#4	9/16"	Bulkhead Posts (cars only)
53	1/2" - 13 x 2-7/8"	(AW) FB	#4	9/16"	Bulkhead Posts (300 Trane)
10	1/2" - 13 x 4-5/8"	(AW) FB	#4	9/16"	Bulkhead Posts (cars only)

NOTE: #4 Nut = MF-2 Way or Equal

R-40-30 RIVET LIST

PER CAR

SIZE

GRIP

LOCATION

UNDERFRAME

2	3/8" x 2-1/4"	1-1/2"	Retainer Key
4	1/2" x 2-1/4"	1"	Center Tread to Door Sill Step
6	5/8" x 2"	5/8"	Door Hook to Side Sill Channel
4	5/8" x 2"	5/8"	Uncoupling Rod Bracket to Car
4	5/8" x 2-1/4"	7/8"	Handhold to End Sill
14	5/8" x 2-1/4"	13/16"	Sill Step to Underframe
6	5/8" x 2-1/4"	3/4"	Mach. Compartment Door Track to Bracket
2	5/8" x 2-1/4"	7/8"	Slack Adjuster to Bracket
26	5/8" x 2-5/8" CSK.	1-3/16"	Door Track to Filler
1	5/8" x 3-1/4"	2-1/8"	Brake Chain to Bell Crank
12	3/4" x 3"	1-3/8"	Draft Gear Carrier to Center Sill
8	3/4" x 3-1/2"		Side Bearing to Truck Bolster

STEEL SIDES & ENDS

8	3/16" x 1/2" Southco		Defect Card & Log Book Holder to Car
70	3/8" x 1-1/4"	3/8"	Louvered Panel to Side Plate & Side Post
18	3/8" x 1-1/2"	21/32"	End to AL Corner Post
19	3/8" x 1-1/2"	21/32"	Louvered Panel to Steel End - AL
19	3/8" x 1-3/4"	25/32"	Louvered Panel to Steel End - AR
8	1/2" x 1-1/2"	9/16"	Hand Brake Support to End
18	1/2" x 1-1/2"	1/2"	Louvered Panel to Header
12	1/2" x 1-1/2"	1/2"	Door Bumper to Side of Car
4	1/2" x 1-1/2"	9/16"	Running Board Angle to Brace
4	1/2" x 1-1/2"	13/32"	Handhold Bracket to "A" End
66	1/2" x 1-7/8"	5/8"	Steel End to End Sill
2	1/2" x 2-1/4"	1-1/16"	Louvered Panel to Side Plate at Corner
30	5/8" x 1-7/8"	1/2"	Corner Post to "B" End
2	5/8" x 2"	5/8"	Louvered Panel to Side Plate at Post
8	5/8" x 2"	9/16"	Running Board Brace & Brake Step Bracket to End
20	5/8" x 2"	11/16"	Corner Cap
10	3/4" x 2-1/8"	7/16"	Bulkhead Header to Side Plate
60	1/2" x 1-3/4"	13/16"	Top Retainer Over Door
28	1/2" x 1-3/8"	3/8"	Top Retainer Beyond Door
12	5/8" x 1-7/8"	7/16"	Brackets to Ladder Stiles

R-40-30 RIVET LIST

PER CAR	SIZE	GRIP	GRIP	LOCATION
<u>ROOF</u>				
40	3/8" x 1-1/4"	1/4"		Running Board to Saddle
280	3/8" x 1-1/4"	3/8"		Roof Sheet to Side Plate
64	3/8" x 1-1/4"	5/16"		Roof Sheet to Top End Section
12	3/8" x 1-3/8"	7/16"		End Running Board Saddle to Roof
242	3/8" x 1-3/8"	1/2"		Seam Cap to Roof Sheet
4	3/8" x 1-3/8"	1/2"		Latitudinal Board to Bracket
44	3/8" x 1-5/8"	5/8"		Running Board Saddle to Seam Cap
44	3/8" x 1-5/8"	11/16"		Seam Cap to Side Plate
4	1/2" x 1-7/8"	3/4"		Latitudinal Board Bracket to Side Plate

NOTE: All Roof Rivets are to be Cold Annealed

MISCELLANEOUS

28	1/4" x 5/8" F.H. Tinner	Heater Well & Drain Spout
----	-------------------------	---------------------------

NOTE: All Rivets are Button Head unless otherwise marked.

Rev. June 11, 1958

BOLT LIST

R-40-30

PER CAR	SIZE	TYPE	NUT	WASHER	LOCK	LOCATION
<u>UNDERFRAME</u>						
2	3/8" x 1-1/2"	Mach.	#4	-	-	Retainer Pipe Clamp
4	1/2" x 1-1/2"	Mach.	#4	-	-	Fuel Pipe Clamp to Bracket
6	5/8" x 2"	Mach.	#4	-	-	Cylinder to Support
1	5/8" x 6"	Mach.	#4	S.A.E.	-	Branch Pipe Tee to Support
4	5/8" x 12"	Mach.	#4	11/16"	-	AB Valve to Support
4	3/4" x 1-3/4"	Mach.	#4	Spring	-	Conn. Tank to Center Sill
3	1" x 7"	Mach.	#4	-	-	Reservoir to Support
<u>STEEL SIDES & ENDS</u>						
4	3/8" x 1-1/4"	S.S.C.	#2	-	-	Brake Step to Bracket
2	3/8" x 1-1/2"	C.C.	#4	-	-	Retainer Valve to Bracket
1	3/8" x 1-1/8"	C.C.	#4	-	-	Retainer Pipe Clamp on "B" End
4	5/8" x 1-1/4"	Flat Neck 1/4"	#4	-	-	End Ladder to "B" End
4	5/8" x 1-1/4"	Flat Neck 1/4"	#4	-	-	Center Ladder Bracket BL
2	5/8" x 1-1/2"	Flat Neck 1/4"	#4	-	-	End Handhold to "B" End
4	5/8" x 1-3/4"	Flat Neck 1/2"	#4	-	-	Door Handhold to Car
2	5/8" x 1-3/4"	Flat Neck 1/2"	#4	-	-	Side Handhold to Sheathing - BR
2	5/8" x 2"	Flat Neck 3/4"	#4	-	-	Handhold at BR Corner
4	5/8" x 1-1/4"	Mach.	#4	-	-	Ladder to "A" End
2	5/8" x 1-1/4"	Mach.	#4	-	-	AR Ladder to Louvered Panel
2	5/8" x 1-1/2"	Mach.	#4	-	-	AR Ladder to Panel at Top
8	5/8" x 1-1/2"	Mach.	#4	-	-	Ladder Brkt. to Underframe
4	5/8" x 1-1/2"	Mach.	#4	-	-	AR Handhold Stile to Car
4	5/8" x 1-3/4"	Mach.	#4	-	-	AR Handhold Brkt. to Car
4	5/8" x 1-3/4"	Mach.	#4	-	-	Hand Brake to Support
4	5/8" x 1-7/8"	Flt. Nk. 3/4"	#4	-	-	Bottom Door Keeper to Car
4	5/8" x 1-7/8"	Flt. Nk. 3/4"	#4	-	-	Top Door Keeper to Car
6	3/8" x 3/4"	Mach.	#4	-	-	Cover Plate to "A" End
<u>FRAMING</u>						
10	3/16" x 1-1/4"	F.H. Stove - G	Std.	1/4"	-	Chest Handle to Bulkhead Pad
3	3/8" x 2"	C.C. - G	Std.	7/16"	-	Ceiling Clip to Bulkhead Pad
9	3/8" x 2-1/2"	C.C. - G	Std.	-	-	Ceiling Nailer Connection
1	3/8" x 6"	C.C.	Std.	7/16"	-	Split Bolt - End Belt (475 cars only)
24	1/2" x 3" #3	Plow	Std.	9/16"	-	Carline Bracket to Carline
34	1/2" x 4" #3	Plow	Std.	9/16"	-	Header & Door Post to Car
36	1/2" x 2-1/2"	C.C. - G	#2	-	-	Ceiling Nailer to Hanger
28	3/8" x 3-3/4"	C.C.	#4	-	#13	Lading Strap Anchor Post to Belt Rail

BOLT LIST

R-40-30

PER CAR	SIZE	TYPE	NUT	WASHER	LOCK	LOCATION
24	1/2" x 2-5/8"	C.C.	Std.	-	#9	Carline Bracket to Top Belt Rail
12	1/2" x 2-3/4"	C.C.	#4	9/16"	-	Door Post to Clip
126	1/2" x 3-5/8"	C.C.	#4	9/16"	#9	Belt Rail to Spacer Block
84	1/2" x 3-3/4"	C.C. - G	#2	-	28-#20	Hinge Butt to Coping Board
40	1/2" x 4-1/4"	C.C.	#4	9/16"	#9	Vertical End Post to Spacer Block
5	1/2" x 6"	C.C.	Std.	9/16"	-	Carline to Vertical End Post
36	1/2" x 6"	C.C. Galv.	#4	-	#9	Ceiling Hanger to Carlines
<u>BULKHEAD FRAMING</u>						
26	1/2" x 4-1/8"	C.C. - G	#4	-	#9	B.H. Reinf. & Blower to Bulkhead
16	5/8" x 4-1/2"	C.C. - G	#4	-	#15	Evaporator to Bulkhead (475 cars)
36	3/8" x 1-1/8" - 5/32"	Collar G	"T"	-	-	Bulkhead Pad to Equipco Cooling Coil
27	1/2" x 4-1/8"	C.C. - G	#4	-	#9	Evaporator to Framing
6	5/8" x 5"	C.C. - G	#4	-	#19	Evaporator to Side Belts Rails
2	5/8" x 5-1/2"	C.C. - G	#4	-	#15	Evaporator to Coping Board
<u>ROOF</u>						
4	3/8" x 1-1/4"	C.C.	#2	-	-	Running Board to Seam Cap
6	5/8" x 2"	Mach.	#4	-	-	Handhold to Running Board (Morton)
<u>SIDE DOOR</u>						
32	3/8" x 6"	C.C.	Std.	-	#16	Door Stile & Top and Bottom Rail
48	3/8" x 2-1/4"	C.C.	Std.	-	#16	Aux. Door Stile & Top and Bottom Aux. Door
24	3/8" x 5"	C.C.	Std.	-	#16	Aux. Door Stile to Door Stile (Rail
16	3/8" x 4-3/4"	C.C.	Std.	-	#16	Aux. Door Rail to Top & Bottom Rail
8	1/2" x 3"	Flt.Nk. 1/4"	#4	9/16"	-	Intermediate Post
64	1/2" x 1-1/4"	Flt.Nk. 1/4"	#4	-	-	Rod Bearing to Door Sheet
16	1/2" x 1"	Flt.Nk. 1/4"	#4	-	-	Operating Rod Guide to Door Sheet
4	1/2" x 1"	Flt.Nk. 1/4"	#4	-	-	Door Lever Holder to Door Sheet
4	1/2" x 1-3/4"	Flt.Nk. 1/4"	#4	9/16"	-	Intermediate Post
4	1/2" x 1"	Flt.NK. 1/4"	#4	-	-	Side Door Handle

July 18, 1958

BOLT LIST

PER CAR	SIZE	TYPE	NUT	WASHER	LOCK	LOCATION
<u>MACHINE COMPARTMENT</u>						
9	3/8" x 1"	Mach.	#4	-	-	Exhaust Pipe to Roof, Ground Strap
16	1/2" x 1-3/4"	Mach.	#4	-	-	Condenser Hold Down (Carrier)
4	3/4" x 3-3/4"	Mach.	#4	-	-	Condenser Hold Down (Trane)
6	1" x 4-1/2"	Mach.	Elastic Stop-	-	-	Engine Hold Down (Witte)
2	5/8" x 1-1/2"	Mach.	#4	-	-	Compartment Door Stop
<u>EXTRA NUTS & WASHERS</u>						
36	3/8"	"T" Galv.				Bulkhead Pad (475 cars)
2	3/8"	C.L.				Exhaust Pipe "U" Bolt
4	5/8"	C.L.				Angle Cock "U" Bolt
<u>FLOOR RACK</u>						
36	1/4" x 1-5/8"	(CSK) G	Std.	-	-	Floor Rack Slat Reinforcement
8	5/8" x 1-1/2"	Mach. G	#4	-	-	Gate Hinge Pin
16	5/8"	G	#4	11/16"	-	Gate Hinge
28	1/2" x 2-3/4"	Mach. G	#4	-	-	Floor Rack Hinge
<u>DRAIN PAN</u>						
2	5/16" x 3-1/2"	Mach. G	#4	3/8"		Wind Guard
4	1/2" x 1-1/4"	Mach.	#4	9/16"		Wind Guard Bracket

CODE:

G - Galvanized
 #4 - MF-2 Way or GN Centerlock
 Flt.Nk.- Flat Neck
 S.S.C.- Short Shoulder Carriage
 "T" - KSM "T" 3/8" -16 Slotted Galv.

NOTE:

All machine bolts are to have
 Hexagon heads.
 All nuts are to be finished Hexagon.

August 8, 1958
 Rev. August 20, 1958

R-40-30

BOLT LIST

PAGE 42A

For Modified Cars 100003 To 100027 Carriers

REVISION

BILL OF MATERIAL FOR CARS IN CLASS

<u>Per</u> <u>Car</u>	<u>Size</u>	<u>Type</u>	<u>Nut</u>	<u>Washer</u>	<u>Location</u>
18	1/2"x3-3/4"	C.C. Galv.	#4	--	Bulkhead reinf. to framing
2	1/2"x1"	C.C. Galv.	#4	--	Side B.H. reinf. to frame top
6	1/2"x3-1/2"	C.C. Galv.	Std.	S.A.E.	Blower to framing
16	1/2"x3-3/4"	C.C. Galv.	#4	--	Evaporator to framing
4	1/2"x1"	Mach.	#4.	--	Split bolt

P.F.E. SCHEDULE NO. P-1-R
REFLECTIVE INSULATION PAPER
CARS CLASS R-40-30

Reflective insulation included in this schedule is covered by Union Pacific Specification No. 201. Must be fire retardant.

Grade No. 1 in Specification No. 201 must be used.

Each car requires one outside course of reflective insulation paper applied next to steel roof, with reflective surface facing outside of car and of size as follows:

<u>SIZE</u>	<u>LOCATION</u>	<u>NO. PCS. PER CAR</u>	<u>TOTAL SQ. FT.</u>
112" x 466"	Roof	1	362.44

San Francisco, Calif.
October 1, 1957

REFLECTIVE PAPER
SCHEDULE NO. P-1-R

PFE SCHEDULE NO. VB-2-WVAPOR BARRIER - WALLSCARS CLASS R-40-30

The Vapor Barrier included in this schedule is covered by
P.F.E. Specification number 202.

<u>No. Pcs. Per Car</u>	<u>Thickness</u>	<u>Size</u>	<u>Location</u>	<u>Matl. Spec.</u>	<u>Total Sq. Ft.</u>
1	.004	540"x132"	Door post to door post (B-end)	202	495.00
2	.004	171"x132"	Door post to B.H. (A-end)	202	314.00
2	.004	68"x101"	Side Door	202	95.38
Total Sq. Ft.					904.38

P. F. E. Schedule No. F-65

FLOOR INSULATION

CARS CLASS R-40-30

Insulation included in this schedule are covered by P.F.E.

Specifications as follows:

, Spec.

Rigid Foamed Plastic 108
Foamed Rubber Hardboard 107
Foamed in Place

No. Pcs. Per Car	Thick- ness	Size	Locations	Matl. Spec.	Total Sq.Ft.
<u>RIGID FOAMED</u> (450 cars)					
16	2"	23-1/2" x 9'-3-3/8"	Between Stringers-Bottom	108	290.81
4	3"	17-3/4" x 23-1/2"	Under Floor Pan	108	11.44
16	4"	23-1/2" x 8'-10-7/8"	Between Stringers - Top	108	279.06
<u>FOAMED RUBBER HARDBOARD</u> (450 cars)					
4	1"	13-1/2" x 23-1/2"	Under Floor Pan	107	8.81
<u>FOAMED IN PLACE</u>					<u>Total</u>
<u>FOAMED IN PLACE</u>					<u>Cu.Ft.</u>
Between Side Sill Angle and Stringer (500 cars)					21.00
Between Stringers (50 cars)					145.08

San Francisco, California
Rev. October 1, 1957
February 28, 1958
November 28, 1958

FLOOR INSULATION
SCHEDULE NO. F-65

P.F.E. SCHEDULE NO. R-67

ROOF INSULATION

CARS CLASS R-40-30

Insulations included in this schedule are covered by P.F.E.

Specifications as follows:

, Spec.

Mineral Wool 105
Laminated Panel 110
Glass Wool 111

No. Pcs. Per Car	Thickness	Size	Location	Matl. Spec.	Total Sq.Ft.
---------------------	-----------	------	----------	----------------	-----------------

PANEL INSULATION

48	2-1/2"	24" x 33-1/2"	Between Carlines	110	268.00
----	--------	---------------	------------------	-----	--------

BLANKET INSULATION

12	2"	33-1/2" x 102"	Between Carlines	105	288.00
2	3"	8" x 456"	@ Eaves	111	50.66
1	4"	104" x 456"	Upper Coarses	111	329.33

San Francisco, California.
Rev. October 1, 1957
Rev. February 6, 1958.

ROOF INSULATION
SCHEDULE NO. R-67

P.F.E. SCHEDULE NO. W-68
WALL INSULATION - BLANKET
CARS CLASS R-40-30

Insulation included in this schedule is covered by
Specification as follows:

Glass Wool 111
Textile Glass Fiber 102

No. Pcs. Per Car	Thickness	Size	Location	Matl. Spec.	Total Sq. Ft.
<u>Blanket Insulation</u>					
1	1"	123" x 132"	"A" End	102	112.75
2	3"	117" x 212"	Side-Door to "B" End	102	344.50
2	3"	117" x 165"	Side-Door to "A" End	102	268.13
1	3"	117" x 132"	"B" End	102	<u>106.70</u>
				Total	719.33
4	3"	16-5/8" x 68-1/4"	Door-Inter.	111	31.52
4	3"	25" x 68-1/4"	Door-Top	111	47.40
2	3"	17" x 68-1/4"	Door-Bottom	111	16.12
2	3"	6" x 84"	Over Door	111	<u>7.00</u>
				Total	101.04
2	4"	24 1/2" x 126"	Bulkhead	102	42.54
2	4"	27" x 126"	Bulkhead	102	<u>46.87</u>
				Total	89.41

WALL INSULATION
SCHEDULE NO. W-68

San Francisco, California
March 3, 1958

P.F.E. SCHEDULE NO. W-68-A
WALL INSULATION
CARS CLASS R-40-30
WITH CARRIER UNIT

Insulation included in this schedule is covered by PFE
Specification 110 - Laminated Panel.

NOTE: First dimension indicates direction of corrugation

No. Pcs. Per Car	Thickness	Size	Location	Total Sq. Ft.
12	3"	24" x 19"	"B" End	38.00
4	3"	28" x 19"	"B" End - Upper	14.77
28	3"	24" x 48"	Between Belt Rails	224.00
28	3"	42-1/4" x 24"	Between Belt Rails - Upper	197.16
4	3"	42-1/4" x 15"	Between Belt Rails	17.60
8	3"	24" x 15"	Between Belt Rails	20.00
12	3"	33-5/8" x 34-1/2"	Door	96.67
2	3"	15-3/4" x 20"	"A" End Bulkhead	4.38
2	3"	15-3/4" x 21-3/8"	"A" End Bulkhead	4.68
4	3"	7" x 22-1/4"	"A" End Bulkhead	4.33
2	3"	23" x 20"	"A" End Bulkhead	6.39
2	3"	23" x 21-3/8"	"A" End Bulkhead	6.83
2	3"	34-3/4" x 20"	"A" End Bulkhead	9.65
2	3"	34-3/4" x 21-3/8"	"A" End Bulkhead	10.32
3	3"	7" x 35"	"A" End Bulkhead	<u>5.10</u>
Total				659.85

WALL INSULATION
SCHEDULE NO. W-68-A

San Francisco, California
March 3, 1958

3548

P.F.E. SCHEDULE NO. W-68-C
WALL INSULATION
CARS CLASS R-40-30
WITH "EQUIPCO" UNIT

Insulation included in this schedule is covered by PFE
Specification 110 - Laminated Panel.

NOTE: First dimension indicates direction of corrugation

No. Pcs. Per Car	Thickness	Size	Location	Total Sq. Ft.
12	3"	24" x 19"	"B" End	38.00
4	3"	28" x 19"	"B" End - Upper	14.77
28	3"	24" x 48"	Between Belt Rails	224.00
28	3"	42-1/4" x 24"	Between Belt Rails - Upper	197.16
4	3"	42-1/4" x 15"	Between Belt Rails	17.60
8	3"	24" x 15"	Between Belt Rails	20.00
12	3"	33-5/8" x 34-1/2"	Door	96.67
4	3"	24" x 20"	Bulkhead	14.70
8	3"	48" x 20"	Bulkhead	<u>58.70</u>
Total				681.60

WALL INSULATION
SCHEDULE NO. W-68-C

San Francisco, California
March 6, 1958

P.F.E. SCHEDULE NO. W-68-B
WALL INSULATION
CARS CLASS R-40-30
WITH TRANE UNIT

Insulation included in this schedule is covered by PFE
Specification 110 - Laminated Panel.

NOTE: First dimension indicates direction of corrugation

No. Pcs. Per Car	Thickness	Size	Location	Total Sq. Ft.
12	3"	24" x 19"	"B" End	38.00
4	3"	28" x 19"	"B" End - Upper	14.77
28	3"	24" x 48"	Between Belt Rails	224.00
28	3"	42-1/4" x 24"	Between Belt Rails - Upper	197.16
4	3"	42-1/4" x 15"	Between Belt Rails	17.60
8	3"	24" x 15"	Between Belt Rails	20.00
12	3"	33-5/8" x 34-1/2"	Door	96.67
2	3"	15-3/4" x 20"	"A" End Bulkhead	4.38
2	3"	15-3/4" x 21-3/8"	"A" End Bulkhead	6.39
4	3"	7" x 22-1/4"	"A" End Bulkhead	4.33
2	3"	18-1/2" x 20"	"A" End Bulkhead	5.14
2	3"	18-1/2" x 21-3/8"	"A" End Bulkhead	5.59
2	3"	13-1/2" x 20"	"A" End Bulkhead	3.75
2	3"	13-1/2" x 21-3/8"	"A" End Bulkhead	4.08
2	3"	23-3/4" x 20"	"A" End Bulkhead	6.60
2	3"	23-3/4" x 21-3/8"	"A" End Bulkhead	7.17
3	3"	7" x 35"	"A" End Bulkhead	5.10
Total				660.70

WALL INSULATION

SCHEDULE NO. W-68-B

San Francisco, California
March 6, 1958

P.F.E. SCHEDULE NO. P-3-T

PRESSED WOOD

FOR CARS CLASS R-40-30

Pressed wood included in this schedule is covered by Pacific Fruit
Express Company Specification No. 300.

Pc. No.	Size	Grade	Item & Location	Per Car	Total Sq.Ft.
F-11	3/16" x 48" x 102"	Temp.	Floor	8	272.00
F-12	3/16" x 31" x 102"	Temp.	Floor	1	21.95
Total					293.95
C-10	5/16" x 5-3/4" x 103-1/4"	Std.	Sub. Ceiling	1	4.12
C-	5/16" x 36" x 103-1/4"	Std.	Sub. Ceiling	12	309.75
L-14	5/16" x 48" x 110-1/2"	Std.	Sub. Lining B-End	1	36.83
L-15	5/16" x 27-3/16" x 110-1/2"	Std.	Sub. Lining B-End	2	38.32
L-17	5/16" x 48" x 104-1/4"	Std.	Sub. Lining - Side	14	484.93
L-19	5/16" x 12-1/2" x 104-1/4"	Std.	Sub. Lining - Side	2	18.09
L-18	5/16" x 13-3/16" x 104-1/4"	Std.	Sub. Lining - Side	2	18.96
L-16	5/16" x 35-7/8" x 104-3/8"	Std.	Sub. Lining - Door	4	103.90
Total					1,014.86

San Francisco, California
March 10, 1958
Rev. April 15, 1958

PRESSED WOOD
SCHEDULE NO. P-3-S

P.F.E. SCHEDULE NO. PW-1-W
PLYWOOD
FOR CARS CLASS R-40-30 CARRIER

Each car requires plywood lining insulation spacer blocks of sizes as follows:

Pc. No.	Size	Item & Location	Per Car	Total Sq.Ft.
L-35	5/16" x 48" x 74"	Sub-Lining-A End	1	24.67
L-34	5/16" x 27-1/4" x 74"	Sub-Lining-A End	1	14.00
L-36	5/16" x 27-1/4" x 74"	Sub-Lining-A End	1	14.00
L-38	5/16" x 9-5/8" x 102-1/2"	Sub-Lining-A End	1	6.85
L-37	5/16" x 5-5/8" x 44-3/8"	Sub-Lining-A End	1	2.01
L-39	5/16" x 23" x 29-1/16"	Sub-Lining-A End	1	4.13
L-40	5/16" x 23" x 29-1/16"	Sub-Lining-A End	1	4.13
Total				69.79
W-23	*5/8 x 3" x 7-3/4"	Spacer Block-Coping Board	44	7.10
W-22	*5/8" x 3" x 4"	Spacer Block-Coping Board	4	.32
Total				6.77
W-28	*3/4" x 4" x 6"	Spacer Block-B End	20	6.67
D-7	*3/4" x 4" x 4"	Spacer Block-Door	16	1.77
B-57	*3/4" x 5" x 9"	Spacer Block-A End	4	1.24
B-58	*3/4" x 3-5/8" x 9"	Spacer Block-A End	2	.46
B-59	*3/4" x 3-5/8" x 9"	Spacer Block-A End	2	.46
B-60	*3/4" x 5" x 5-5/8"	Spacer Block-A End	2	.46
Total				11.06
L-3	1" x 38-3/4" x 98-3/4"	Lining-A End	1	28.57
L-2	1" x 36" x 98-3/4"	Lining-A End	1	24.69
L-1	1" x 32-3/16" x 98-3/4"	Lining-A End	1	22.76
	1" x 48" x 98-3/4"	Lining-B End	2	65.84
W-24	*1" x 4" x 4-3/4"	Spacer Block-Belt Rail	20	2.64
W-25	*1" x 4" x 7-1/2"	Spacer Block-Belt Rail	44	11.25
W-26	*1" x 4" x 4"	Spacer Block-Top Rail	2	.22
W-27	*1" x 4" x 6"	Spacer Block-B End	20	3.33
W-28	*1" x 4" x 6"	Spacer Block-B End	20	3.33
B-50	*1" x 5" x 12"	Spacer Block-A End	3	1.25
B-51	*1" x 3-5/8" x 12"	Spacer Block-A End	1	.30
B-52	*1" x 3-5/8" x 4"	Spacer Block-A End	1	.10
B-53	*1" x 5" x 9"	Spacer Block-A End	3	.94
B-54	*1" x 3-5/8" x 9"	Spacer Block-A End	2	.45
B-55	*1" x 5" x 11-3/4"	Spacer Block-A End	3	1.22
B-56	*1" x 3-5/8" x 11-3/4"	Spacer Block-A End	2	.59
B-57	*1" x 5" x 9"	Spacer Block-A End	4	1.25
B-58	*1" x 3-5/8" x 9"	Spacer Block-A End	2	.45
B-59	*1" x 3-5/8" x 9"	Spacer Block-A End	2	.45
B-60	*1" x 5" x 5-5/8"	Spacer Block-A End	2	.39
Total				173.02

NOTE: All 1" thick plywood lining to be A-C ext. Grade. Spacer Blocks to be C-C ext. Grade. All "A" Grade surfaces are to be sanded. All Plywood to conform with U.P. Spec. CS-107. Size of insulation spacer blocks may be reduced by amount required for saw cuts in order to cut blocks from standard 48" x 96" panels without waste.

P.F.E. SCHEDULE NO. PW-1-W
PLYWOOD
FOR CARS CLASS R-40-30 EQUIPCO

Each car requires plywood lining insulation spacer blocks of sizes as follows:

Pc. No.	Size	Item & Location	Per Car	Total Sq.Ft.
L-30	5/16" x 48" x 94"	Sub-Lining - A End	1	31.33
L-31	5/16" x 27-1/4" x 94"	Sub-Lining - A End	1	17.79
L-29	5/16" x 27-1/4" x 94"	Sub-Lining - A End	1	17.79
L-32	5/16" x 29-3/8" x 17-3/16"	Sub-Lining - A End	1	3.50
L-33	5/16" x 29-3/8" x 17-3/16"	Sub-Lining - A End	1	3.50
			Total	73.91
W-23	*5/8" x 3" x 7-3/4"	Spacer Block - Coping Board	44	7.10
W-22	*5/8" x 3" x 4"	Spacer Block - Coping Board	4	.32
			Total	6.77
W-28	*3/4" x 4" x 6"	Spacer Block - B End	20	6.67
D-7	*3/4" x 4" x 4"	Spacer Block - Door	16	1.77
			Total	8.44
L-10	1" x 48" x 98-3/4"	Lining - A End	1	32.92
L-9	1" x 36" x 98-3/4"	Lining - A End	1	24.69
L-8	1" x 21-21-1/2 x 98-3/4"	Lining - A End	1	14.74
	1" x 48" x 98-3/4"	Lining - B End	2	65.84
W-24	*1" x 4" x 4-3/4"	Spacer Block - Belt Rail	20	2.64
W-25	*1" x 4" x 7-1/2"	Spacer Block - Belt Rail	44	11.25
W-26	*1" x 4" x 4"	Spacer Block - Top Rail	2	.22
W-27	*1" x 4" x 6"	Spacer Block - B End	20	3.33
W-28	*1" x 4" x 6"	Spacer Block - B End	20	3.33
B-71	*1" x 4" x 4"	Spacer Block - A End	19	1.00
B-72	*1" x 2-5/8" x 4"	Spacer Block - A End	6	.61
B-73	*1" x 4" x 4" x 4"	Spacer Block - A End	2	.22
B-74	*1" x 6" x 38" x 4"	Spacer Block - A End	3	.99
B-75	*1" x 4" x 6"	Spacer Block - A End	2	162.33
			Total	162.11

NOTE: All 1" thick plywood lining to be A-C ext. Grade. Spacer Blocks to be C-C ext. Grade. All "A" Grade surfaces are to be sanded. All Plywood to conform with U.P. Spec. CS-107. Size of insulation spacer blocks may be reduced by amount required for saw cuts in order to cut blocks from standard 48" x 96" panels without waste.

For details of fabrication see P.F.E. Drwgs. Nos.

All spacer blocks over 1" thick may be made by combining 2 separate blocks.

* All items marked * are to be cut to size and/or machined by PFE Co.

All other items are to be furnished as shown on drawing.

All 5/16" plywood to be BC Grade.

San Francisco, California.

March 27, 1958

PLYWOOD
SCHEDULE NO. PW-1-W

P.F.E. SCHEDULE NO. PW-1-W
PLYWOOD
FOR CARS CLASS R-40-30 TRANE

Each car requires plywood lining insulation spacer blocks of sizes as follows:

Pc. No.	Size	Item & Location	Per Car	Total Sq.Ft.
L-42	5/16" x 48" x 74"	Sub-Lining - A End	1	24.67
L-43	5/16" x 27-1/4" x 74"	Sub-Lining - A End	1	14.00
L-41	5/16" x 27-1/4" x 74"	Sub-Lining - A End	1	14.00
L-44	5/16" x 9-3/8" x 102-1/2"	Sub-Lining - A End	1	6.58
L-45	5/16" x 5-5/8" x 44-3/8"	Sub-Lining - A End	1	2.01
L-46	5/16" x 23" x 29-1/16"	Sub-Lining - A End	1	4.48
L-46	5/16" x 23" x 29-1/16"	Sub-Lining - A End	1	4.48
Total				70.22
W-23	*5/8" x 3" x 7-3/4"	Spacer Block - Coping Board	44	7.19
W-22	*5/8" x 3" x 4"	Spacer Block - Coping Board	4	.37
Total				6.77
W-28	*3/4" x 4" x 6"	Spacer Block - B End	20	6.67
D-7	*3/4" x 4" x 4"	Spacer Block - Door	16	1.77
B-57	*3/4" x 5" x 9"	Spacer Block - A End	4	1.24
B-58	*3/4" x 3-5/8" x 9"	Spacer Block - A End	2	.46
B-59	*3/4" x 3-5/8" x 9"	Spacer Block - A End	2	.46
B-60	*3/4" x 5" x 5-5/8"	Spacer Block - A End	2	.46
Total				11.06
L-4,5	1" x 23-7/8" x 98-3/4"	Lining - A End	2	32.74
L-6	1" x 36" x 98-3/4"	Lining - A End	1	24.69
L-7	1" x 23-13/16" x 98-3/4"	Lining - A End	1	16.33
	1" x 48" x 98-3/4"	Lining - B End	2	65.84
W-24	*1" x 4" x 4-3/4"	Spacer Block - Belt Rail	20	2.64
W-25	*1" x 4" x 7-1/2"	Spacer Block - Belt Rail	44	11.25
W-26	*1" x 4" x 4"	Spacer Block - Top Rail	2	.22
W-27	*1" x 4" x 6"	Spacer Block - B End	20	3.33
W-28	*1" x 4" x 6"	Spacer Block - B End	20	3.33
B-78	*1" x 5" x 9"	Spacer Block - A End	4	1.25
B-79	*1" x 3-5/8" x 9"	Spacer Block - A End	2	.45
B-80	*1" x 3-5/8" x 9"	Spacer Block - A End	2	.45
B-81	*1" x 5" x 5-5/8"	Spacer Block - A End	2	.39
Total				162.91

NOTE: All 1" thick plywood lining to be A-C ext. Grade. Spacer blocks to be C-C ext. Grade. All "A" Grade surfaces are to be sanded. All Plywood to conform with U.P. Spec. CS-107. Size of insulation spacer blocks may be reduced by amount required for saw cuts in order to cut blocks from standard 48" x 96" panels without waste.

For details of fabrication see P.F.E. Drwgs. Nos. 2R-4427 and 2R-4548.

All spacer blocks over 1" thick may be made by combining 2 separate blocks.

* All items marked * are to be cut to size and/or machined by PFE Co.

All other items are to be furnished as shown on drawing.

All 5/16" plywood to be BC Grade.